

# **Can a Food and Agriculture Organisation distance-learning tool improve the knowledge and understanding of dietitians in South Africa regarding the right to food?**

by  
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## **DECLARATION**

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## ENGLISH - ABSTRACT

CAN A FOOD AND AGRICULTURE ORGANISATION DISTANCE-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

**Background:** The South African Constitution guarantees the right to food for all. Although nutrition policies, strategies and programmes exist, high rates of poverty, malnutrition and food insecurity remain a major public health concern. Dietitians play a critical role in advocating for the right to food and developing and implementing food security strategies, yet dietitians who qualified before 2007 do not have any formal human rights training. No tested or validated human rights training tools are available to train dietitians on the right to adequate food and nutrition in South Africa.

**Objectives:** The aim of the study was to investigate the suitability of the “Right to Food” distance-learning tool of the United Nations Food and Agriculture Organisation (FAO) to improve South African dietitians’ knowledge and understanding of the right to adequate food and nutrition. The researcher investigated perceptions of dietitians regarding human rights and the right to adequate food at the start of the study as well as whether the FAO developed e-learning tool could improve their knowledge and understanding of right to food concepts. The final goal was to provide feedback the FAO.

**Method:** An intervention study design was used and all dietitians working in South Africa who met the entry criteria were eligible to partake. Using convenience sampling, 26 participants consented. Participants completed a demographic and human rights questionnaire and pre-test before the course commenced. A post-test and course evaluation were administered after the course had been completed.

**Results:** A statistically significant difference ( $p < 0.001$ ) between pre- and post-tests showed an improvement in knowledge for the 26 participants who completed the course. Participants agreed the course enhanced their knowledge and understanding of human rights and the right to adequate food and nutrition and would recommend it to other dietitians. Dietitians reported feeling better equipped to advocate for the right to adequate food and nutrition in South Africa. Feedback to FAO included making downloadable content available to participants and reviewing and updating course content using the FAOs guide to developing e-learning courses. By prioritising

reading lists, streamlining and simplifying content focused on legal frameworks and providing a comprehensive glossary of terminology the course would be more user-friendly. Developing a practical version, would further strengthen the course, making it a valuable tool used to train dietitians on the right to food and improve their knowledge and understanding.

**Conclusion:** By testing and statistically proving that the FAO e-learning tool improved the knowledge and understanding of dietitians in South Africa, this study has validated the distance-learning course as an important capacity-building resource for dietitians to advocate for and strengthen a human rights-based approach to food and nutrition security programmes, policies and strategies in South Africa. CPD accreditation by the HPCSA will provide incentive and opportunity for dietitians to improve their knowledge and understanding of human rights and the right to adequate food. The boom of electronic media and access to e-learning opportunities, such as this course, provides exciting prospects for training healthcare professionals all over the world.

## AFRIKAANS - ABSTRAK

KAN 'N "FOOD AND AGRICULTURE ORGANISATION" AFSTANDSONDERRIG-LEEREENHEID DIE KENNIS, PERSEPSIES EN BEGRIP VAN DIEETKUNDIGES IN SUID-AFRIKA VERANDER RAKENDE DIE REG TOT VOEDSEL?

**Agtergrond:** Die Suid-Afrikaanse Grondwet waarborg die reg op voedsel vir almal. Alhoewel voedingbeleid, -strategieë en -programme bestaan, bly hoë voorkoms van armoede, wanvoeding en voedselonsekerheid 'n belangrike openbare gesondheidsorg bekommernis. Dieetkundiges speel 'n kritieke rol om voorspraak te maak vir die reg op voedsel en die ontwikkeling en implementering van voedselveiligheidsstrategieë, tog het dieetkundiges wat voor 2007 gekwalifiseer het, het geen formele menseregte opleiding nie. Geen uitgetoetste of gevalideerde menseregte-opleidings instrumente is beskikbaar om dieetkundiges in Suid-Afrika op te lei nie.

**Doelwitte:** Die doel van die navorsing was om ondersoek in te stel of die e-leer kursus oor die "Reg tot Voedsel" van die Verenigde Nasies se Voedsel en Landbou Organisasie ("United Nations Food and Agriculture Organisation" (FAO)) geskik is om Suid-Afrikaanse dieetkundiges se kennis, begrip en persepsies van die reg op voldoende voedsel en voeding te verander. Die navorser het huidige persepsies van dieetkundiges rakende menseregte en die reg op voldoende voedsel ondersoek, asook of die FAO se e-leerkursus hul kennis en begrip van reg op voedselkonsepte kon verander. Die finale doel was om aanbevelings te maak vir die FAO.

**Metode:** 'n Beskrywende, deursnee-studie-ontwerp is gebruik en alle dieetkundiges wat in Suid-Afrika werk, wat aan die insluitingskriteria voldoen het, het gekwalifiseer om deel te neem. Met behulp van geriefs steekproefneming het 26 deelnemers ingestem tot deelname. Deelnemers het 'n demografiese en menseregte-vraelys voltooi. Hulle het ook 'nvoortoets afgelê voordat die kursus begin het. 'n Na-toets- en kursusevaluering is afgelê nadat afloop van die kursus.

**Resultate:** 'n Statisties betekenisvolle verskil ( $p < 0.001$ ) tussen voor- en na-toetse het 'n positiewe kennisverandering getoon vir die 25 deelnemers wat die kursus voltooi het. Deelnemers het die saamgestem dat die kursus hulle kennis en begrip van menseregte en die reg op voldoende voedsel en voeding verbeter het en hul sal dit vir alle dieetkundiges aanbeveel. Dieetkundiges het gesê hulle voel beter toegerus om voorspraak te maak vir die reg op voldoende voedsel en voeding in Suid Afrika. Aanbevelings vir die FAO sluit in dat elektronies aflaaibare inhoud beskikbaar moet wees vir deelnemers asook die hersiening en opdatering van kursusinhoud met

behulp van die FAO se “gids vir die ontwerp en ontwikkeling van e-leer kursusse.” Deur die opdatumhou van bronnelyste en vereenvoudiging van die inhoud wat fokus op regsraamwerke, asook die verskaffing van 'n omvattende terminologielys, sal die kursus meer gebruikersvriendelik wees. Die ontwikkeling van 'n praktiese weergawe vir gesondheidsorgwerkers sal die kursus verder versterk en dit 'n waardevolle instrument maak om gesondheidsberoepes oor die reg op voedsel op te lei en hul kennis, persepsies en begrip te verbeter.

**Gevolgtrekking:** Die uittoetsing van die FAO se e-leerinstrument het statisties bewys dat die kennis, persepsies en begrip van dieetkundiges in Suid-Afrika verbeter het. Hierdie studie het die e-leerkursus geldig verklaar as 'n belangrike kapasiteitsbouhulpbron vir dieetkundiges om voorspraak te maak vir 'n menseregte-gebaseerde benadering tot voedsel- en voedingsekerheidsprogramme, -beleid en -strategieë in Suid-Afrika, asook om dit te versterk. Akkreditering deur die Suid-Afrikaanse Raad vir Gesondheidsberoepes vir voortgesette voedingsonderrig sal aansporing en 'n geleentheid vir alle gesondheidsorgwerkers bied om hul kennis, persepsies en begrip van menseregte en die reg op voldoende voedsel te verbeter. Die oplewing van elektroniese media en toegang tot e-leergeleenthede, soos hierdie kursus, bied opwindende vooruitsigte om professionele gesondheidsorgwerkers oor die hele wêreld op te lei.

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## **CONTRIBUTIONS BY PRINCIPAL RESEARCHER AND FELLOW RESEARCHERS**

The principal researcher (Nicola Eley) developed the research question and the protocol. The principal researcher planned the research, undertook data collection, captured the data for analysis, interpreted the data and drafted the thesis. Data analysis was conducted with the assistance of statistician at the Biostatistics Unit at the Centre for Evidence-based Healthcare at Stellenbosch University, Dr. C. Lombard. Mrs. Liesbet Koornhof and Mrs. Maritha Marais (Supervisors) provided input at all stages and revised the protocol and thesis. Ms. Jessica Eley acted as research assistant and provided technical support in ensuring and maintaining confidentiality, while Ricky Rontsch (B.Luris) reviewed the thesis and provided language editing.



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## LIST OF ACRONYMS AND ABBREVIATIONS

ADSA	Association for Dietitians in South Africa
BEE	Black Economic Empowerment
CEUs	Continuing Education Units
CPD	Continuing Professional Development
DAFF	Department of Agriculture, Forestry and Fisheries
DoE	Department of Education
DoSD	Department of Social Development
FAO	United Nations Food and Agriculture Organisation
GC12	General Comment No. 12
HPCSA	Health Professions Council of South Africa
HRs	Human Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
IGWG	Inter-governmental Working Group
MOOC	Massive Open Online Courses
NDP	National Development Plan
NPFNS	National Policy on Food and Nutrition Security
RtF	Right to Food
SA	South Africa
SADC	Southern African Development Community
SAHRC	South African Human Rights Council
SR	Special Rapporteur
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNICEF	United Nations International Children's Fund

UNHRC	United Nations Human Rights Council
VGRtAF	Voluntary Guidelines

## DEFINITIONS

Fundamental freedoms	The fundamental freedoms are freedom of expression, freedom of religion, freedom of thought, freedom of belief, freedom of peaceful assembly and freedom of association. <sup>1</sup>
Human rights	Human rights are rights inherent to all human beings, whatever our nationality, place of residence, sex, national or ethnic origin, colour, religion, language, or any other status. We are all equally entitled to our human rights without discrimination. These rights are all interrelated, interdependent and indivisible. Universal human rights are often expressed and guaranteed by law, in the forms of treaties, customary international law, general principles and other sources of international law. International human rights law lays down obligations for governments to act in certain ways or to refrain from certain acts, in order to promote and protect the human rights and fundamental freedoms of individuals or groups. <sup>2</sup>
Knowledge	Facts, information, and skills acquired through experience or education; the theoretical or practical understanding of a subject. <sup>3</sup>
Progressive realisation	Obligation to take appropriate measures towards the full realization of economic, social and cultural rights to the maximum of their available resources. <sup>4</sup>
Rights-based approach	A human rights-based approach is a conceptual framework for the process of human development that is normatively based on international human rights standards and operationally directed to promoting and protecting human rights. It seeks to analyse inequalities which lie at the heart of development problems and redress discriminatory practices and unjust distributions of power that impede development progress. <sup>5</sup>
Understanding	The ability to understand something; comprehension. <sup>6</sup>

## CHAPTER 1: LITERATURE REVIEW AND MOTIVATION FOR THE STUDY

### 1.1 Development of the human rights concept

The purpose of the United Nations (UN), as stated in Article 1(3) - “Purposes and Principles” - of the UN Charter, is to: “To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion”.<sup>7</sup> Franklin D Roosevelt was one of the first international figures to embrace the human rights cause, which he famously expressed in his “Four Freedoms” speech in 1941.<sup>8</sup> Subsequently the Universal Declaration of Human Rights (UDHR) was adopted by the UN General Assembly on 10 December 1948. Article 2 of this document, states that human rights and fundamental freedoms are applicable to every person, everywhere: “everyone is entitled to all rights and freedoms set forth in this Declaration.”<sup>9</sup>

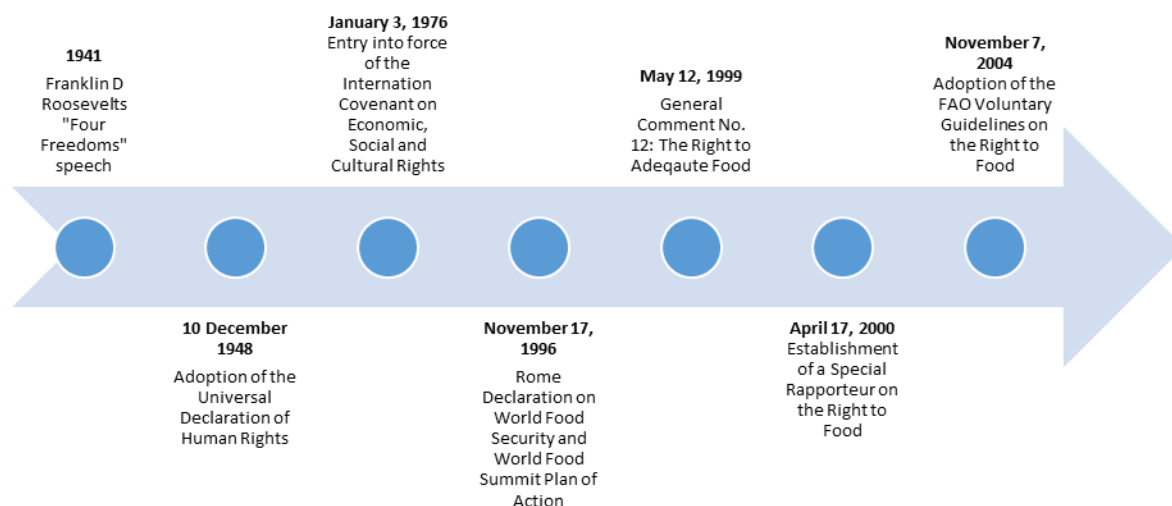
### 1.2 The right to adequate food

The United Nations, for the first time, recognised the right to adequate food as a human right in Article 25 of the UDHR, stating:

“Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, and housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.”<sup>10</sup>

In order to hold states accountable to the contents of the UDHR it became important to develop a set of legally binding instrument for states, resulting in the development and adoption of The International Convention on Economic, Social and Cultural Rights (ICESCR) in 1966. It took 10 years (1976) to be ratified by the UN General Assembly.<sup>8</sup> The right to food was specifically recognised in Article 11 of the ICESCR, “when every man, woman and child, alone or in community with others, have the physical and economic access at all times to adequate food or means for its procurement”.<sup>11</sup>

Figure 1.1 provides a visual timeline of significant milestones in human rights history and specific events relevant to the Right to Food movement.



**Figure 1.1: Timeline of important events in the history of human rights and right to adequate food and nutrition<sup>12</sup>**

### 1.2.1 General Comment No. 12

At the World Food Summit in 1996, governments reaffirmed the right to food and committed themselves to halve the number of hungry and malnourished from 840 to 420 million by 2015.<sup>13</sup> At the same summit a resolution was adopted giving more focus on the right to food.<sup>13</sup> Three years later (1999), General Comment No. 12 (GC12)<sup>14</sup> was accepted as the official interpretation of Article 11 of the ICESCR and addresses “substantive issues arising in the implementation of the ICESCR”.<sup>13</sup> This document aims to provide a more focused explanation of obligations, violations, implementation and monitoring of the right to food at national level.<sup>15</sup> In this landmark interpretation, the right to adequate food is described as being:

“...indivisibly linked to the inherent dignity of the human person and is indispensable for the fulfilment of other human rights enshrined in the International Bill of Human Rights. It is also inseparable from social justice, requiring the adoption of appropriate economic, environmental and social policies, at both the national and international levels, oriented to the eradication of poverty and the fulfilment of all human rights for all.”<sup>15</sup>

GC12, approved by the United Nations Economic and Social Council, echoes the fact that the root causes of hunger and malnutrition are “not lack of food but lack of access to available food...because of poverty,

by large segments of the world's population".<sup>16</sup> Despite the international communities' affirmation of the importance of respecting the right to food, there is a distressing gap between the principles of Article 11 of the ICESCRs and the reality for millions of people worldwide, most of them in the developing world.<sup>16</sup> The number of people who are malnourished and chronically hungry has increased, reaching an infamous record of over 1 billion people worldwide.<sup>17</sup> Furthermore, hidden hunger – micronutrient deficiencies that cause stunted physical and intellectual growth in children – amounts to over 2 billion people worldwide.<sup>18</sup> So, although states (who ratified the Covenant) are obliged to respect, protect and fulfil the right to food, the practical difficulties in achieving this human right are demonstrated by persistent food insecurity across the world.<sup>19</sup> These statistics also demonstrate the slow pace at which economic, social and cultural rights, and hence the right to food, has been realised for millions of people.

### *1.2.2 The Special Rapporteur on the right to food*

Since 1979, special mechanisms created by the UN examine specific country situations or themes from a human rights perspective. In 2000, as the right to food movement was gaining international momentum, and in order to respond fully to an integrated and coordinated approach in the promotion and protection of the right to food, the position of Special Rapporteur (SR) on the right to food was created.<sup>20</sup> Special Rapporteur is a title given to individuals working on behalf of the UN within the scope of "Special Procedures"<sup>21</sup> mechanisms who bear a specific mandate from the United Nations Human Rights Council. The current SR on the right to food is Ms. Hilal Elver from the United States of America.<sup>22</sup> She is expected "to promote the full realization of the right to food" by "examining ways of overcoming existing and emerging obstacles" and does this by submitting country-specific proposals and presenting recommendations on how the right to food can be fully realised.<sup>20</sup> The right to food, according to the SR, which is also in line with GC12, is the

"right to have regular, permanent and unrestricted access, either directly or by means of financial purchases, to quantitatively and qualitatively adequate and sufficient food corresponding to the cultural traditions of the people to which the consumer belongs, and which ensure a physical and mental, individual and collective, fulfilling and dignified life free of fear".<sup>22</sup>

### *1.2.3 Voluntary guidelines for the progressive realisation of the right to food*

It was at the World Food Summit in Rome in 2002 that an agreement was reached "that voluntary guidelines for the progressive realisation of the right to food...should be elaborated".<sup>13</sup> This task was given

to the Intergovernmental Working Group (IGWG) established by the Council of the United Nations Food and Agriculture Organisation, which was to be a major development in the area of social and economic rights in the future. The work of the IGWG concluded in November 2004 with the adoption of Voluntary Guidelines to Support the Progressive Realisation of the Right to Adequate Food in the Context of National Food Security (VGRtAF) by the FAO Council.<sup>13</sup> The VGRtAF aim to assist states in implementing the obligations committed to in the ICESCR in order to achieve the goals of the World Food Summit Plan of Action.<sup>23</sup> The VGRtAF cover the full range of actions to be considered by governments at the national level in order to:

“...build an enabling environment for people to feed themselves in dignity and to establish appropriate safety nets for those who are unable to do so. They can be used to strengthen and improve current development frameworks, particularly with regard to social and human dimensions, putting the entitlements of people more firmly at the centre of development”.<sup>23</sup>

The VGRtAF represent opportunities for integrating human rights into the work of agencies dealing with food and agriculture, such as the FAO.<sup>23</sup>

International human rights law and the positive landmark events in the history of the right to food movement have been highlighted in the introductory section. However, in order to better understand the right to food in South Africa it is necessary to reflect on the food insecurity situation and discuss how far the post-apartheid government has come to progressively ensure the right to adequate food for its citizens.

### **1.3 Food security in South Africa**

According to literature, South Africa is a net exporter of cereals, the largest importer of agricultural products and is “food secure” at national level.<sup>24</sup> To the contrary, the Hunger Index, developed from the National Food Consumption Survey of 2005, indicates that chronic food insecurity exists in over 50% of households.<sup>25</sup> South Africa faces many challenges in ensuring an adequate standard of living for its citizens and remains a dual economy (an economy that consists of two sectors, (e.g. agricultural and manufacturing<sup>26</sup>) with one of the highest inequality rates in the world, perpetuating both inequality and exclusion. According to Statistics South Africa, South Africa’s Gini coefficient reached 0.68 in 2015<sup>27</sup> - by far the highest in the Southern African Development Community - where the poorest 20% of the South

African population consume less than 3% of total expenditure, while the wealthiest 20% consume 65%.<sup>25</sup> Correlations can be made between these statistics and the poor improvement in child nutrition in South Africa in the last 20 years. A review of anthropometric data shows that child stunting has remained at around 25% since 1993, making this condition one of the leading forms of malnutrition in the country.<sup>28</sup> Stunting rates of children under five years old are preferred in the food security and nutrition literature as a robust, objectively measured indicator of chronic undernutrition or long-term food insecurity.<sup>28</sup> It is of grave concern that children who experience malnutrition in early childhood also experience impaired physical and mental development.<sup>29</sup>

Similarly, 1 in 10 children under 5 are underweight and 13.4% of children under the age of 5 years are overweight.<sup>30</sup> Furthermore, a specific challenge facing South Africa is the negative impact of HIV/AIDS on food security. South Africa has the largest HIV epidemic in the world, with 19% of the global number of people living with HIV, 15% of new infections and 11% of AIDS-related deaths.<sup>31</sup> Over 7 million people are HIV-positive and approximately 1 in 5 women of reproductive age are infected.<sup>32</sup> Chopra et al. concluded that this has a significant impact on economic activity and income generation, which in turn negatively affects access to food because most households purchase food.<sup>33</sup>

The Roadmap for Nutrition in South Africa: 2013 to 2017 states that South Africa is in a phase of nutrition transition where under- and over-nutrition coexist, often in the same household. These complex factors are compounded by the HIV and AIDs pandemic, food insecurity and micronutrient deficiencies.<sup>34</sup>

Results published in the General Household Survey 2014, suggest the rising cost of living, including increasing prices of basic food items, have caused a reduction in dietary diversity in poor households, as more of the available budget is allocated to staple foods (bread and maize meal), leaving less to spend on other food groups.<sup>28</sup> It is therefore not surprising that despite spending almost half of their income on food, poor families are being steadily forced into eating cheaper, less nutritious food – more starch but less protein, vegetables and fruit.<sup>28</sup> Rising electricity prices also impact on food quality as poor South Africans are forced to buy pre-cooked and processed foods that require little or no preparation, instead of fresh foods that are costly to buy and to cook.<sup>28</sup>



## 1.4 The right to food in South Africa

This section will outline the South African Constitution and highlight programmes, policies and strategies employed by the government, which directly or indirectly address the right to adequate food and nutrition.

### 1.4.1 *The South African Constitution, Act 108 of 1996 (the Constitution)*

In the South African Constitution economic, social and cultural rights sit alongside and equal to civil and political rights in the Bill of Rights.<sup>35</sup> The Preamble of the Constitution states:

“we...adopt this Constitution... so as to - Heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;...Improve the quality of life of all citizens and free the potential of each person...”<sup>35</sup>

The sentiment and aim of this document is to undo the wrongs of the past and build a nation where every citizen has equal opportunity to live a life they value.<sup>36</sup>

This was confirmed in the Bill of Rights contained in Chapter 2 of the Constitution, which outlines the founding values of human dignity, achievement of equality, advancement of human rights and freedoms, non-racism and non-sexism, accountability, responsiveness and openness.<sup>37</sup>

The right to food and nutrition is enshrined in the Constitution. Three main constitutional provisions directly protect the right to adequate food in South Africa.

Section 27 (1)(b) of the Bill of Rights, which deals with the right to health care, food, water and social security states that not only is the state obligated to take reasonable steps to progressively ensure “access to sufficient food and water” within available resources, but also to ensure access to health care services and social security.<sup>38</sup>

While the aforementioned provision is the core condition relating to the right to adequate food for all South Africans, the rights of two other groups are specifically mentioned.

Section 28 (1)(c) of the Bill of Rights, which makes provision for the rights of children, states that “every child has the right to...basic nutrition”<sup>39</sup> and section 32 (2)(e), which deals with the rights of arrested,

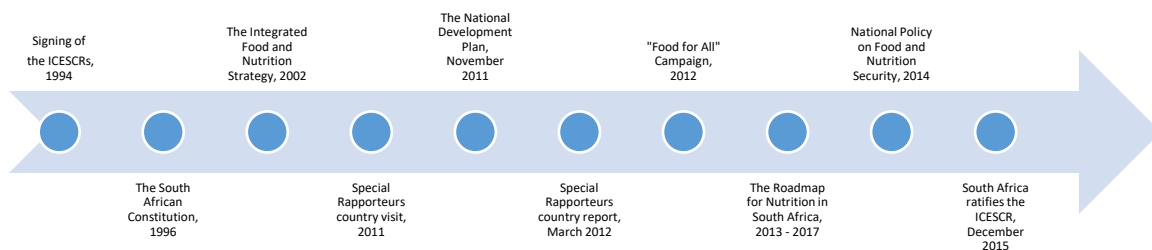
detained and imprisoned persons states that detained persons are entitled to the “provision, at state expense, of adequate...nutrition”.<sup>40</sup>

Language used to describe state obligations under section 7 (2) of the Constitution echoes the standards and norms of the ICESCR and call for human rights to be respected, protected, promoted and fulfilled.<sup>37</sup> This is significant as South Africa hadn’t ratified the ICESCR until 2015. By becoming party to international treaties, SA assumes obligations and duties under international law to respect, protect and fulfil human rights. This means that in order to:

“...respect human rights, States must refrain from interfering with or limiting the enjoyment of human rights. The obligation to protect requires States to protect individuals and groups against human rights abuses. The obligation to fulfil means that States must take positive action to facilitate the enjoyment of basic human rights”.<sup>41</sup>

#### *1.4.2 Programmes, policies and strategies that support the right to adequate food and nutrition*

Beyond the Constitutional provisions, there exist programmes, policies and strategies that directly or indirectly contribute to the realisation of the right to adequate food for South Africans, including the National Development Plan (NDP): Vision 2030, National Policy on Food and Nutrition Security (2014), and the Roadmap for Nutrition in South Africa (2013 - 2017), as outlined in Figure 1.2.



**Figure 1.2: Timeline of important events in the history of the right to adequate food and nutrition in South Africa**

On a strategic level, the Integrated Food Security Strategy (IFSS), approved by Cabinet in 2002 was the over-arching programme attempting to eradicate hunger and food insecurity in SA by 2015.<sup>42</sup> It was also the government’s first attempt to streamline, harmonise and integrate diverse food security

programmes.<sup>43</sup> Although some successes were reported, without coordinated strategies, household food security remains threatened and secure access to food by all is not guaranteed.<sup>43</sup>

The NDP aims to address poverty, inequality and unemployment by ensuring access to water, electricity, sanitation, jobs, housing, public transport, adequate nutrition, education, social protection, quality healthcare, recreation and a clean environment to all South Africans.<sup>44</sup> The NDP acknowledges food and nutrition security to be both a consequence and cause of poverty and inequality.<sup>44</sup>

In February 2012 the South African government launched an innovative social protection programme called, “Food for All Campaign”, designed to complement existing poverty and hunger initiatives and support the realisation of the right to adequate food and nutrition by implementing a rights-based programme to reduce incidents of extreme hunger and malnutrition in an effort to restore the dignity of many South Africans.<sup>45</sup> In the same year, the Department of Agriculture, Forestry and Fisheries (DAFF) launched the Zero Hunger Programme, which built on the Campaign’s aim to reduce food insecurity by improving access to nutritious food, by strengthening Pillar 1 (increased food production and trade) of the IFSS.<sup>46</sup> At a National Council of Provinces Committee Meeting, DAFF briefed the Land and Mineral Resources Committee on the Zero Hunger Programme and Food Security Policy. During that sitting, committee members expressed dissatisfaction that plans had not translated into real action and DAFF had yet to demonstrate real success in this regard.<sup>47</sup>

One of the key national programmes focusing specifically on nutrition and by extension elements of the right to adequate food is the Roadmap for Nutrition in South Africa, 2013 to 2017<sup>34</sup> (Roadmap) (previously known as the Integrated Nutrition Programme).<sup>48</sup> Its purpose is to render nutrition services to specific target groups, combining direct and indirect nutrition interventions to address malnutrition.<sup>34</sup> The Roadmap lists a number of priority interventions, including exclusive breastfeeding, promoting the health of women during pregnancy and breastfeeding, nutrition education, therapeutic zinc, vitamin A, iron folate and calcium supplements, micronutrient supplements for undernourished people, ensuring optimal growth and development of children and preventing diseases of lifestyle.<sup>34</sup> By protecting vulnerable South African’s from hunger, malnutrition and related diseases, these interventions speak to the essence of the right to adequate food and nutrition.

The National Policy on Food and Nutrition Security 2014 (NPFNS), replacing the IFSS, provides a common definition of food and nutrition security, a guiding framework for multi-sectoral synergy between various departments and civil society contributing towards regional food security.<sup>49</sup> The policy aims to address four areas (adequate availability, accessibility, utilisation, safety and quality and stability of food supply) that affect food and nutrition security by improving nutritional safety nets, nutrition education, investment in agriculture, improved market participation and risk management, as described in Table 1.1, and which encourage and allow for multi-sectoral initiatives and programmes.<sup>49</sup>

**Table 1.1: Pillars of the National Policy on Food and Nutrition Security in South Africa<sup>49</sup>**

Pillars	Initiatives and programmes
The availability of improved <b>nutritional safety nets</b>	Government run and supported nutrition and feeding programmes, emergency food relief, as well as private sector, Community-Based Organisation and Non-Governmental Organisation interventions.
Improved <b>nutrition education</b>	District level nutrition services to assist households and communities monitoring nutritional indices, providing consumer literacy and assisting with better food management and improved meal planning.
The alignment of <b>investment in agriculture</b> towards local economic development, particularly in rural areas	Provision or subsidisation of inputs and support services for increased food production, as well as more effective food storage and distribution networks, involving both government and private agencies, to eliminate waste and ensure better access to food for all.
Improved <b>market participation</b> of the emerging agricultural sector	Public-private partnerships, including off-take and other agreements, a government food purchase programme that supports smallholder farmers, as well as through the implementation of the Agri-BEE Charter, which requires agro-processing industries to broaden their supply bases to include the emerging agricultural sector.
Food and Nutrition Security <b>Risk Management</b>	Increased investment in research and technology to respond to the production challenges currently facing the country, such as climate change and bioenergy. It would also include the protection of prime agricultural land, and limitations on its alienation for other activities, including mining, game farming, and property development. Improved food security information management systems would also be required, with periodic scientific reviews of the state of food security in the country.

### 1.5 The Special Rapporteur's country report (South Africa) – main findings and application to this study

While the above mentioned strategies indicate a clear commitment by government to address nutrition and food security with a rights-based approach, the country visit by Special Rapporteur (at that time,

Professor Olivier De Schutter, 2008 to 2014) represented a significant point in the country's human rights timeline (Figure 1.2) and provided an opportunity for an external policy review.<sup>50</sup> At the invitation of the South African government, the SR's visit to South Africa took place in July 2011 and in March the following year his findings were presented to the United Nations Human Rights Council (UNHRC).<sup>50</sup>

The SR commenced his report by maintaining how surprised he was that South Africa had not yet ratified the ICESCR's especially in light of the progressive, rights-based nature of the Constitution and the work the Constitutional Court has undertaken in protecting and promoting socio-economic rights in South Africa.<sup>50</sup> He confirmed that the government has good policies but lacks action regarding their implementation, which presents significant challenges when dealing with food security issues and recommended independent monitoring of government plans by the SAHRC.<sup>50</sup> It was the SR's opinion that the government needed to provide greater support to emerging black farmers through the provision of financing, agricultural training as well as removing barriers hindering equal market access and emphasised the importance of adopting a human rights-based approach<sup>4</sup> when designing policies and programmes in the future.<sup>50</sup> De Schutter commended the government on its efforts to improving household food security through the provision of direct cash transfers under the Social Security Act.<sup>50</sup> Social grants are widely regarded as the most effective poverty alleviation programme since democracy because of their positive impact and wide reach.<sup>30</sup> In 2017, over 12 million children under the age of 18 years, benefited from the R380 per month cash transfer.<sup>30</sup> This is significant as approximately 4 million children live in the poorest 40% of households and 62% of children under the age of 6 years live below the upper poverty line.<sup>30</sup>

The SR noted the Household Food Production Programme has had proven effects on reducing food insecurity by providing direct access to food but suggested that scarce resources (both human and financial) would be better spent if the focus was shifted to communal gardens.<sup>50</sup> De Schutter discussed the effect nutrition transition has had on the South African population. He specifically mentioned the paradox of undernourished children being raised in households with overweight children and adults and proposed a return to a more traditional diet combined with increased physical activity.<sup>50</sup>

Agreeing with many of the SR's report finding, Maunder and Khoza state that, in spite of this rich policy environment, "adequate food and nutritional health for all" has not translated into reality.<sup>51</sup> While there is demonstrated willingness or commitment, inadequate action has been taken. The right to food is a

cross-cutting, multidimensional problem that calls for collaborative efforts from various sectors and departments, including agriculture, nutrition, health, land, housing, trade, labour and public works.<sup>51</sup>

In conclusion, implementation of policies that support the right to food and the delay in ratifying the ICESCR, which was signed in 1994 by Nelson Mandela but only ratified on 12 January 2015,<sup>52</sup> has resulted in slow and thus less effective realization of economic, social and cultural rights in South Africa. Jacob Zuma, President of South Africa until 2017, has a long record of declaring his support for South Africa's role at the forefront of human rights. Already in 2000 he said that the "ratification and implementation of international human rights instruments"<sup>53</sup> along with the "mechanisms to monitor the implementation and protection of such rights"<sup>53</sup> are a key component of the global human rights agenda. There is now a need for South Africa to speed up and show the world that it is serious about protecting basic human rights.

### **1.6 The significance for dietitians to have human rights knowledge**

UNICEF's Conceptual Framework, setting out the causes of malnutrition, clearly demonstrates the link between health, nutrition and socio-economic factors<sup>54</sup> and provides a blueprint for dietitians to address food and nutrition security challenges using a rights-based approach, which argues that "poverty and hunger is caused by injustice and the solution...is to promote human rights".<sup>54</sup>

Furthermore, Guideline 10.3 of the VGRtAF of the FAO requires "states...to involve all relevant stakeholders...in the design, implementation, management, monitoring and evaluation of programmes to increase the production and consumption of healthy and nutritious foods".<sup>55</sup>

The roles and responsibilities of nutrition professionals include improving the nutritional status, health and well-being of clients, by determining and addressing underlying causes of nutrition problems as described by the Health Professions Council of South Africa (HPCSA)<sup>56</sup> and other relevant rights-based documents, i.e. the Roadmap.<sup>51</sup> It could therefore be argued that in order for dietitians to effectively address underlying causes of malnutrition, in-depth knowledge and application of human rights principles are required. Eide provides additional motivation for this view by stating that human rights provide a specific perspective and opportunity, which nutrition professionals need to be aware of when addressing nutritional problems.<sup>57</sup> Therefore and in order to implement a rights-based approach, nutrition professionals need to be informed, educated, skilled and capacitated in this field.<sup>57</sup>

### **1.7 The role of the Health Professions Council of South Africa (HPCSA) in promoting human rights education for dietitians**

The Health Professions Council of South Africa, a statutory body established in terms of the Health Professions Act 56 Of 1974, is dedicated to promoting the health of all South Africans through the maintenance and promotion of standards of professional education and training, and ensuring that excellent standards of ethical and professional practice are upheld.<sup>58</sup> Booklet 1 of the HPCSA “General ethical guidelines for the healthcare professions”<sup>58</sup> makes specific reference to the fact that one of the core ethical values of a health professional is to recognise the human rights of all individuals. Furthermore, this booklet states that health professionals need to fulfil different roles and therefore they also have different kinds of duties imposed by the South African Constitution and law, such as natural and legal duties and moral obligations.<sup>58</sup> Inarguably, knowledge of the right to food is critical for the effective execution of dietitians’ duties and obligations to advance the right to food in their professional capacity. The introduction of a number of the HPCSA ethical guidelines and rules in the booklet includes the following statement:

“To be a good healthcare practitioner, requires a life-long commitment to sound professional and ethical practices and an overriding dedication to the interests of one’s fellow human beings and society. In essence, the practice of healthcare professions is a moral enterprise.”<sup>58</sup>

In response to sentiments expressed in previously mentioned documents, the HPCSA, in 2007, stipulated that knowledge of human rights principles must form part of generic competencies of university curricula for all healthcare professionals, including dietitians.<sup>59</sup> Subsequently, universities offering Dietetics programmes are required to integrate human rights and right to food principles into the curriculum for undergraduate students.<sup>59</sup> With greater awareness of the Constitutional obligations of the state, dietitians would better be able to advocate for progressive realisation of the right to food.

Maunder and Khoza highlight four reasons why dietitians need training in human rights principles. Human rights principles provide dietitians with a unique perspective and set of tools with which to address nutrition-related problems and by shifting the focus onto rights-holders, they are better able to advocate for the realisation of all rights related to nutrition.<sup>51</sup>

Dietitians are in contact with the very people whose daily food security is affected by national policies and programmes. If dietitians, involved in policy formulation and implementation, were proficient in human rights principles they could play a vital role in ensuring that all future health policies are designed using a rights-based approach to better deal with poverty and health issues affecting the right to adequate food. Dietitians can therefore advocate for the right to food movement in South Africa and become involved in campaigns that aim to motivate government to work towards achieving adequate food for all. By making country specific training available to dietitians and sensitising them to state obligations, as outlined in the Bill of Rights contained in the South African Constitution, opportunities exist for dietitians to become advocates for fulfilling rights related to nutrition.<sup>51</sup>

One of the options available to train dietitians is the FAO tool, developed to be completed online on a voluntary basis.

### **1.8 E-learning tool compiled by the FAO to promote knowledge about the right to adequate food and nutrition**

Experts in the field of human rights and the right to adequate food were commissioned by the FAO to develop “A Primer to the right to adequate food”, which was published in 2007.<sup>60</sup> The purpose of the e-learning tool is to facilitate capacity-building training support on the right to adequate food.<sup>60</sup> The Primer is an example of a learning tool that could aid in the process of training dietitians who graduated from South African universities prior to 2007 about human rights and the right to adequate food.

Content covered in the “Introduction to the right to adequate food”, which consists of seven study units (Table 1.2), introduces basic information on human rights principles and looks more in-depth at the right to adequate food and its practical applications.<sup>60</sup> Interestingly, GC12, which plays an important part in conceptualising the right to food, is not included as a separate study unit.



**Table 1.2: Content included in the “Introduction of the right to adequate food” e-learning tool<sup>60</sup>**

Study Unit	Title
1.	Human rights-based approach to development
2.	The concept of the right to adequate food
3.	Rights and obligations
4.	Recourse mechanisms
5.	History of the right to adequate food
6.	The right to food guidelines
7.	The right to adequate food in practice

The FAO tool is generic in nature, making the addition of country-specific content to the course essential and developers therefore suggest that study units be adapted, contextualised and even incorporated into existing training curricula at university level.<sup>60</sup> In the curriculum outline document, developers advise that a pre- and post-course assessment instrument be completed by each participant to determine if the course content can contribute to capacity building.<sup>13</sup> Interestingly, since the course’s development in 2007, the primer has never been tested to assess whether it is able to effectively meet this goal.<sup>61</sup>

### **1.9 E-learning and its application to continuing professional development of health professionals in South Africa**

Since the development of the FAO’s e-learning tool, the world-wide web and internet have grown in popularity as a medium for communication, obtaining information and providing educational resources and represent exciting opportunities for continuing professional development of health professionals.<sup>61</sup> A study on the perceptions of nurses’ regarding online continuing education agrees that online learning provides benefits such as convenient and flexibility training, which has considerable potential for continuing education for healthcare professionals.<sup>62</sup>

One of the difficulties in getting a clear sense of the literature of online learning is the multiple terms used to describe the phenomenon, including distance learning, distributed learning, online learning, computer-mediated learning and e-learning.<sup>63</sup> According to the Handbook of Online Learning by Rudestam and

Schoenholtz-Read, the preferred term in the literature today is e-learning, defined by the Instructional Technology Council as “the process of extending learning or delivering instructional materials to remote sites via the Internet, intranet/extranet, audio, video, satellite broadcast, interactive TV and CD-ROM”.<sup>63</sup> Similarly massive open online courses (MOOCs) are aimed at unlimited participation and open access via the web.<sup>64</sup> MOOCs can be used to provide nutrition courses and can be a cost-effective and convenient way to provide continuing education to nutrition and health professionals worldwide, providing those in developing countries with much needed education opportunities.<sup>65</sup> In-person workshops are expensive to conduct and reach only the limited number who can travel to workshop sites.<sup>65</sup> Governments and non-governmental organisations need affordable and efficient ways to train community-based staff who are unable to travel to training sites.<sup>65</sup> Distance education can be a cost effective and convenient way to provide high-quality continuing professional education, particularly for those in low- and middle-income countries.<sup>65</sup>

In the book “What the research tells us: Research Center for Educational Technology”,<sup>66</sup> e-learning should be at least equivalent to learning through traditional face-to-face, classroom-based instruction. Therefore determining the success and learning effectiveness thereof is a critical outcome measure.<sup>66</sup> If e-learning is less successful than traditional classroom education, it is of little value.<sup>66</sup> Having said that, there is good and ample evidence to suggest that students learn as much online as they do in traditional classroom environments.<sup>66</sup> Russell created a “No Significant Difference” website that presents the results of 355 research reports, summaries and papers that report no significant differences between the learning outcomes of students’ learning over distance and students’ learning in traditional classrooms.<sup>67</sup> Of course, there have been studies that have reported significantly poorer learning in online courses. For example, Chen et al. compared traditional, correspondence, and online learners and found that correspondence test scores were highest and test scores from online courses were the lowest.<sup>68</sup>

E-learning is a worthy platform to reach a large number of participants from geographically dispersed locations with limited mobility and in an environment where participants are highly motivated to learn and appreciate working at their own pace.<sup>69</sup> It enables participants to complete course work in a familiar learning environment<sup>69</sup> and provides convenience and flexibility regarding time and schedule.<sup>69, 70, 71</sup> An advantage to the learning institution offering online courses is that, although initial course design and development is more expensive than preparing classroom material and training trainers, there are long-term cost savings to be made in ongoing course delivery (including costs of web servers and technical

support) as well as classroom facilities and instructor time.<sup>69</sup> There are cost savings for participants too: no need to travel or take time off work, course materials are often available for free online and no job time is lost to attend classroom sessions.<sup>69,70,71</sup> Participation in e-learning courses also provide participants with an opportunity to improve and develop their computer skills.<sup>70</sup>

### **1.10 Problem statement and motivation for the study**

It is thus evident that the HPCSA requires dietitians to have a thorough understanding of health and human rights, and therefore testing the FAO e-learning tools' ability to improve the knowledge and understanding of dietitians in South Africa regarding the right to food is essential.

As mentioned, until 2007, undergraduate programmes at South African universities offering dietetics degrees were not required to include human rights and the right to food in the curriculum. The consequences for those dietitians who graduated before this time is that they would not have had the opportunity to fully understand their role in promoting human rights and the right to adequate food.

At present, there are no tested or validated training tools available to train qualified dietitians on the principles of human rights and the right to food in South Africa. In order to advocate for and strengthen a human rights-based approach to food and nutrition security programmes and policies in South Africa, it is important that dietitians are empowered and educated in this field. The third aim of the Roadmap focuses on "nutrition promotion through policy development, improved communication, advocacy and appropriate legislation".<sup>34</sup> A rights-based approach encompasses these concepts and as the Roadmap is primarily implemented by dietitians, such training becomes critical.

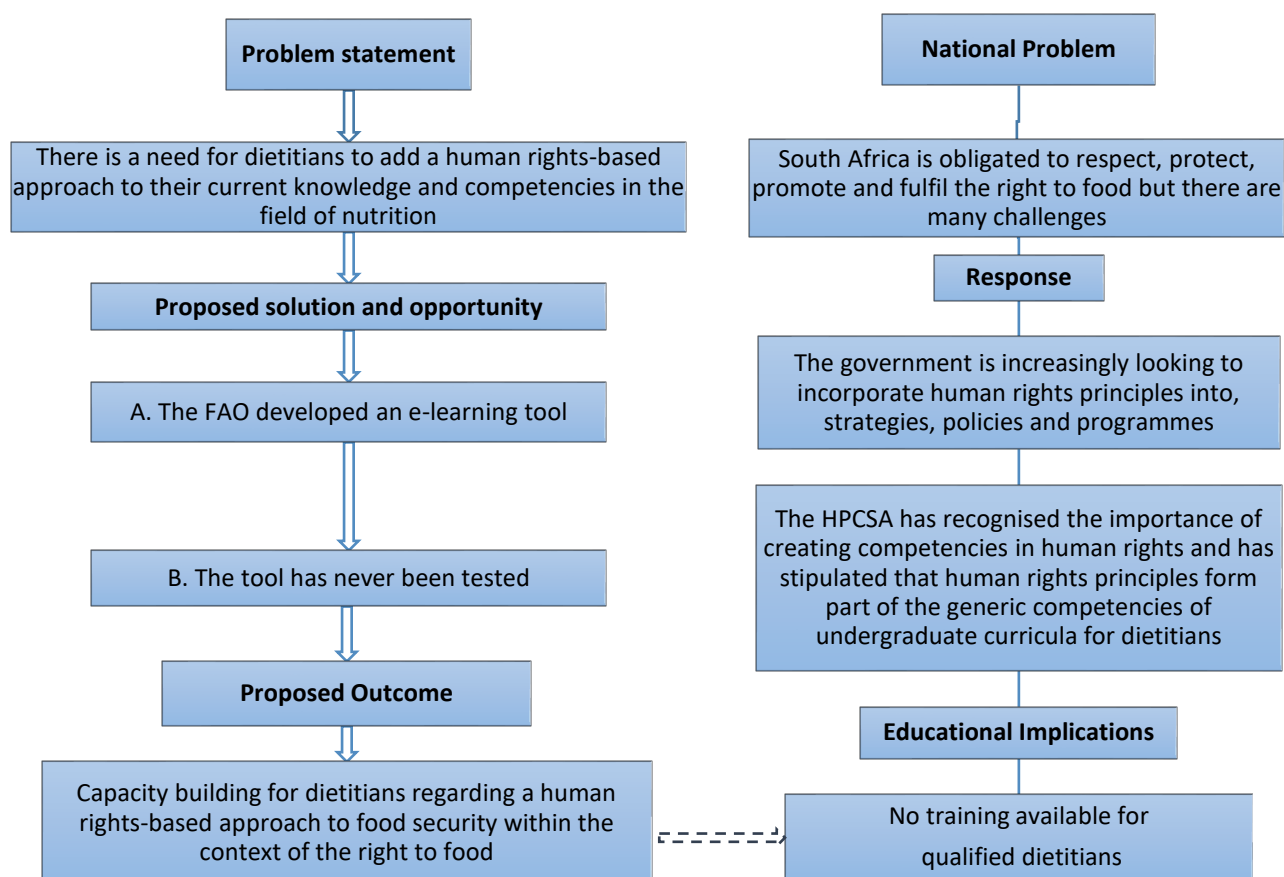
The content of the e-learning course being proposed and the type of capacity-building generated could provide the knowledge and understanding required to implement a rights-based approach to food and nutrition security problems in South Africa and provide a valuable country-specific, teaching and capacity-building tool.

Not only will dietitians, as a result of their improved understanding of the right to food after completion of the e-learning course, be able to empower and educate communities and individuals, they could also potentially experience a change in the way that they personally approach nutrition challenges presented

to them.<sup>34</sup> An improvement in understanding and knowledge of human rights and the right to adequate food, could potentially result in a more sustained change in the way that dietitians conduct their work.

### **1.11 Conceptual Framework**

The current challenge is that very few South African dietitians have formal education regarding human rights and the right to food. Dietitians who deal with food security issues are faced with a multi-pronged problem, as aptly described in the UNICEF Conceptual Framework of the causes of malnutrition.<sup>54</sup> This is compounded by high rates of poverty, malnutrition and the negative impact HIV/AIDS has had on food security. The following conceptual framework will demonstrate how this research could possibly provide a country-specific training tool, which could improve dietitian's knowledge and understanding of human rights and right to adequate food concepts (Figure 1.3). Due the complex nature of this topic and the multiple possible linkages, the researcher has chosen to proceed with a simplified version as shown below.



**Figure 1.3: Conceptual framework demonstrating how an e-learning tool developed by the FAO could improve the knowledge and understanding of South African dietitians regarding human rights and the right to adequate food.**

This prompted the researcher to investigate a human rights and right to food and nutrition course contextualised for South African dietitians and provide an example of a pre- and post-test to determine an improvement in knowledge and understanding. Based on findings, feedback can be provided to the FAO on how to improve the course and encourage the HPCSA to accredit the course for dietitians in South Africa.

Pre-tests refer to tests made before an intervention is introduced to a group and post-test to tests made after an intervention is introduced. This methodology offers better evidence about intervention effectiveness. The pre-and-post design is most useful in indicating immediate impacts of short-term programmes. This evaluation design however has been shown to suffer from several threats to internal

validity including history, instrumentation, regression-to-the-mean, testing, placebo, Hawthorne, maturation and dropout.<sup>72</sup>

## CHAPTER 2: METHODOLOGY

This chapter outlines the study objectives and research questions and details the sampling and data collection methods used in the study.

### 2.1. Introduction

The study took place online, with an 8-week data collection period from 4 July to 28 August 2017. The researcher investigated the perceptions of South African dietitians regarding the concept of human rights and the right to adequate food at the start of the study and whether a FAO developed, e-learning tool could improve their knowledge and understanding of the right to food concepts. The final goal was to provide the FAO with feedback for possible areas of improvements.

### 2.2. Study aim and objectives

#### 2.2.1 *Aim of the study*

The aim of the study was to investigate the suitability of a “Right to Food” e-learning tool to improve South African dietitians’ knowledge and understanding of “the right to adequate food and nutrition”.

#### 2.2.2 *Research objectives*

- To develop and administer two questionnaires that will assess if an improvement in knowledge and understanding took place before and after dietitians had completed an e-learning course.
- To describe the perceptions of dietitians regarding the concept of human rights and the right to adequate food and nutrition at the start of the study.
- To determine whether the e-learning tool improved dietitian’s knowledge and understanding of the right to food and nutrition concepts.
- To provide the FAO with feedback for possible areas of improvements.

#### 2.2.3 *Research questions*

- What are South African dietitians’ knowledge of human rights and the right to adequate food and nutrition at the start of the study?
- Will the FAO e-learning tool be able to improve the knowledge of dietitians on the right to adequate food and nutrition?

- Does the inclusion of General Comment No. 12 and the literature on the right to food and nutrition in South Africa enhance the FAO e-learning tool for South African dietitians?
- Do dietitians regard this e-learning course as a suitable tool to train other dietitians in the future?

Null Hypothesis: The FAO development e-learning course does not improve the knowledge and understanding of dietitians in South Africa regarding human rights and the right to adequate food and nutrition.

## **2.3 Study design**

An intervention study design was used.

## **2.4 Study population and sampling**

### *2.4.1 Study population*

All dietitians registered with the HPCSA and who met the entry criteria, specified under section 2.4.3.1 were eligible to partake in the study.

### *2.4.2 Sample Selection*

Convenience sampling was used to recruit participants.

### *2.4.3 Sample size*

The HPCSA database shows that 4663 dietitians were registered in South Africa at the time of conducting the research.<sup>73</sup> However, due to legislation (Protection of Personal Information Act and Promotion of Access to Information Act) protecting information, the HPCSA does not provide its database or contact details of registered professionals. Thus for convenience, the Association of Dietitians of South Africa (ADSA) database which accounts for 1407 dietitians, representing 30.2% of the HPCSA's members was used. In consultation with a statistician sample size was calculated. With an expected average response rate of 5%, the expected sample population was 70 participants. Based on the rationale that this course would be most beneficial to dietitians working in the public sector, a moderate response rate was proposed.



#### 2.4.3.1 *Inclusion criteria*

- Registered dietitians in South Africa who returned a completed Demographics and human rights questionnaire;
- The e-learning course is available in English thus all participants had to be competent in English;
- Computer literate;
- The availability of internet access and an active e-mail account

#### 2.4.3.2 *Exclusion criteria*

- Dietitians involved in the pilot study;
- Dietitians providing expert opinions;
- Dietitians who completed a formal course or module on human rights and the right to food and nutrition;
- Dietitians who did not return a completed Demographic and human rights questionnaire or those who returned the questionnaire but did not want to partake in the study

#### 2.4.4 *Summary of recruitment of study participants*

Dietitians on the ADSA mailing list received an email from ADSA informing them of the research including an advertisement (Addendum A). Dietitians were requested to complete a brief questionnaire (Addendum B) regarding their professional qualifications and any formal/informal human rights training they had received. Invitations were sent out twice over a period of 4 months (February and May 2017) providing ample opportunity for dietitians to sign up.

### 2.5 **Methods of data collection**

#### 2.5.1 *Description of the FAO e-learning course*

This course, entitled "A Primer to the Right to Adequate Food", is part of the e-learning curriculum "Right to Food in Practice".<sup>60</sup> It introduces principles and concepts of the human right to adequate food and nutrition and its practical application.<sup>60</sup> The course provides an overview of the historical development of this human right, the rights-based approach to development, recourse mechanisms, Right to Food Guidelines and describes the rights, obligations and responsibilities of rights-holders and duty-bearers.<sup>60</sup>

Each study unit aimed to achieve a specific set of learning objectives, and used interactive step-by-step instructions and exercises that reinforced what was being explained and included a list of relevant online resources and additional reading.<sup>60</sup> The course provided an interactive self-paced learning environment, using various e-learning methodologies, including storytelling, illustrative case studies, simulations and demonstration, as well as interactive tests and practice exercises.<sup>60</sup>

The e-learning course for this study comprised the FAO developed e-learning tool (as described above) with the addition of a study unit on GC12 (unit 8). To ensure country-specific content, the researcher added South African subject matter to study unit 7 (The right to food in practice). Five journal articles selected by the researcher with the guidance and advice of her study leaders and experts in the field of nutrition and human rights were included (Table 2.1).

Included in the consent form (addendum C) was a brief description of the FAO course and study providing participants with information on the course structure and process going forward.

**Table 2.1: South African content added to study unit 7**

Article	Reason for including in study unit 7
<b>1. Issues in Public Health: Food insecurity in households in informal settlements in urban South Africa.</b> <b>N Naicker, A Mathee, J Teare, April 2015<sup>74</sup></b>	This study highlights the plight of South Africans living in urban informal settlements where poverty levels dictate the degree of food security.
<b>2. Why does malnutrition persist in South Africa despite social grants? DST-NRF Centre of Excellence in Food Security Food Security SA Working Paper Series.</b> <b>Stephen Devereux and Jennifer Waidler, January 2017<sup>28</sup></b>	This paper reviews the evidence on food security and child nutrition trends in South Africa and identifies several reasons why nutrition outcomes appear to be lagging behind improvements in other food security indicators.
<b>3. Report of the Special Rapporteur on the right to food on his mission to South Africa (7–15 July 2011).</b> <b>Olivier De Schutter<sup>50</sup></b>	The report examines the state of food security in South Africa and the legal and policy framework guiding the efforts of the government. It outlines a possible strategy for the full realisation of the right to food that could ensure food availability and access for all through appropriate social assistance programmes and income opportunities.
<b>4. National Policy on Food and Nutrition Security.</b> <b>Department of Social Development</b> <b>Department of Agriculture, Forestry and Fisheries, August 2013<sup>75</sup></b>	This is the overarching government policy on food and nutrition security in South Africa with the aim of ensuring the availability, accessibility and affordability of safe and nutritious food at national and household level.
<b>5. The Right to Food in South Africa: An analysis of the content, policy effort, resource allocation and enjoyment of the constitutional right to food.</b> <b>Daniel McLaren, Busiso Moyo and Jared Jeffery, with contributions from Zukiswa Kota and Muhammad Zakaria Suleman, July 2015<sup>76</sup></b>	This paper provides a resource for activists, researchers and policy-makers concerned with the reduction of food insecurity in South Africa.

### 2.5.2 Development of the pre- and post-test (addenda D and E)

The researcher developed a pre- and post-test for the purposes of this study population and study. Tests were identical and aimed to determine if the e-learning course improved the knowledge and

understanding of participants regarding human rights and the right to food and nutrition. All questions included in the test were derived from the course material in the e-learning tool and included open-ended, true, false, and multiple-choice questions. The maximum score for each test was 68.

The development process of the pre- and post-test compromised sourcing questions from the course material itself. Questions were reviewed by study leaders and experts in the field of nutrition and human rights. Below is a summary of the various sections of the tool and an indication as to whether questions were assessing knowledge or understanding or both (Table 2.2).

**Table 2.2: Summary of pre- and post-test questions (addenda D and E) and their assessment of knowledge and understanding**

Section	Question	Content	Knowledge	Understanding
One	1.	Food security	✓	
	2.			✓
	3.			✓
	4.	Human rights-based approach, laws and instruments	✓	
	5.		✓	
	6.			✓
	7.			✓
	8.		✓	
	9.			✓
	10.			✓
	11.			✓
	12.	The right to food in South Africa	✓	
	13.		✓	
	14.		✓	
	15.		✓	
Two	16. to 37.	Food security, human rights-based approach, laws and instruments and The right to food in South Africa	✓	
3	38.	Expectations (pre-test) and experience (post-test)	NA	NA

### 2.5.3 *Course evaluation form (addenda F)*

An existing course evaluation form developed by experts in the field of human rights at various Norwegian academic institutions was utilised by the researcher. It has been implemented with success by academics with expertise in the field of curriculum evaluation and student assessment. The course evaluation form comprised four sections assessing matters relating to the planning of the course, working methods and conduct, course content and a general assessment.

### 2.5.4 *Data collection process*

A research assistant supported the researcher and ensured anonymity and confidentiality of participants. The research assistant holds a Post Graduate Certificate in Education. The research assistant's responsibilities included assigning participant codes at the outset of the course, emailing codes to participants and at the end of the course, linking participant codes to names in order for CPD certificates to be awarded.

All dietitians registered with ADSA were given the opportunity to sign up for the e-learning course by returning completed questionnaires by a set deadline. Information provided in the questionnaire was used to determine compliance with inclusion criteria. After providing informed consent (Addendum C), a complete list of eligible participants was created and sent to the research assistant who assigned unique participant codes. These codes were generated using an online numeric algorithm and sent to participants via email by the research assistant. The participant code is a unique identifier allowing for pre- and post-test results to be compared while maintaining anonymity of participants. In order to ensure this, it was the first question on both tests. Participants were then directed, via email, to the pre- or post-test (Addenda D and E) using an online survey platform (SurveyMonkey.com Corporation - SurveyMonkey).<sup>77</sup> SurveyMonkey is an online survey development tool providing free and customisable surveys containing a common range of question types (e.g., fixed choice, open-ended etc.).

Detailed instructions and login information was emailed to participants at the outset of the study including timelines and deadlines for completion and submission of both tests and the course evaluation form. Participants were directed to the FAO e-learning tool at [www.fao.org/righttofood](http://www.fao.org/righttofood) and requested to create a personal login profile. Course material could be accessed directly from the site. Participants completed study units in their own time during the 8-week period. All additional study material for study unit 7 and 8 was e-mailed to participants during week 4 by the researcher.

After week 8, a link was sent to participants via email where the post-test (Addendum E) and course evaluation form (Addendum F) could be accessed, completed and submitted via SurveyMonkey. Reminders were sent to participants at critical points in the data collection process (completion of questionnaires, submission of consent forms, at 4 weeks and when the post-test and course evaluation forms were due). As an incentive for completing all components of the study, the course was accredited with ADSA for Continuing Professional Development (CPD) and provided participants 16 Continued Education Units (CEUs) (Level 2: Ethics).

## **2.6 Preparation for the study**

A pilot study was conducted after ethical approval had been obtained (refer to section 2.9.1) with the aim of determining validity and internal reliability of research instruments and to test the process to be followed during the study.

### *2.6.1 Validity*

Content and face validity of research instruments were determined before the outset of the study as well as internal reliability of the pre- and post-test. During the pilot study, the study process was also tested.

#### *2.6.1.1 Content validity*

Content validity is a subjective measure which aims to determine if relevant information and an appropriate amount of content is included in a questionnaire or test.<sup>78</sup> For the purpose of this study, the research instruments (pre- and post-test, Demographic and human rights questionnaire) were evaluated by two content experts with in-depth knowledge of the right to food and nutrition, the FAO e-learning course and the current food security situation in South Africa. Their feedback was received via email. Comments from these experts aimed to make questions easier to understand and lessen confusion regarding intricate human rights terminology and reasoning as well suggestions on how to improve formatting of questionnaires. It was also suggested that definitions for unfamiliar words be incorporated.

#### *2.6.1.2 Face validity*

Nine, 3rd year Dietetics students from Stellenbosch University who completed the undergraduate module on the right to food and nutrition were recruited to partake in the pilot study with the aim of testing the

study process. In order to determine face validity of research instruments, students completed Addendum G commenting on clarity and language of questions, layout and if the research instruments were user friendly. Feedback from students included struggling with the language used (question was related to master-ship of her second language, and the fact that another student refuted the comment, this specific comment was ignored) and clarity between similar questions.

All students found the layout for the pre-test and course evaluation form clear and easy to follow. Based on feedback provided by students the wording of questions was improved and expanded to ensure questions were clearer and easier to understand.

Two content experts reviewed the face validity of research instruments and provided input and comment which was incorporated into the final versions.

#### *2.6.1.3 Face and content validity of the course evaluation form*

Content validity of the course evaluation form was not evaluated. The form was based on a form developed by experts in the field of curriculum evaluation and student assessment and was thus deemed suitable for this study (refer to section 2.5.3).

#### *2.6.2 Assessment of internal reliability of pre- and post- test questions*

The same group of 3<sup>rd</sup> year dietetic students completed the pre-test questionnaire twice over a 2-week period. Data collected from both tests were captured in an excel spreadsheet by the researcher and analysed by a statistician. Cronbach's alpha measuring values ranging between zero and 1 was used to evaluate reliability or internal consistency of the set of true and false questions where, 0.7 is the cut off value for being acceptable. For the purpose of this study, a value below 0.7 was considered unreliable. At both time points the tests had good reliability, since alpha was >0.7.

#### *2.6.3 Testing the study process*

Nine 3<sup>rd</sup> year Dietetics students were asked to participate in a trial online course to test the study process. The following steps were followed:

1. The Demographic and human rights questionnaire (Addendum B) was emailed to students, together with a unique participant code (separate from the main study, to be used during the remainder of the pilot).

2. Students received a link to SurveyMonkey's website, where they gained access to the first 10 questions of the pre-test (Addendum D).
3. They were then directed to FAO's website ([www.fao.org/righttofood](http://www.fao.org/righttofood)) and instructed to create a personal login profile. Students were not required to complete the course as they were already familiar with the topic having completed undergraduate course work which included a module on ethics and human rights.
4. Students received additional study material for study units 7 and 8 via email and a link to the post-test (Addendum E). Students did not need to complete the post-test as it is the same as the pre-test.
5. Students were emailed an additional questionnaire (Addendum H) which aimed to assess if the process, as mentioned above and in the methodology, was correctly followed and to determine if any problems existed. Similar to the main study, deadlines were set for the completion of all tasks.

Students received all the above-mentioned information successfully and were able to navigate the process without any reported problems or difficulties.

## **2.7 Research instruments**

Three research instruments, developed for this study, were used to assess knowledge of the right to food and nutrition prior to the commencement of the course: Demographic and human rights questionnaire (Addendum B); the pre- and post-test (Addenda D and E) and the course evaluation form (Addendum F).

### **2.7.1 Demographic and human rights questionnaire: (Addendum B)**

Information pertaining to basic demographic and education levels was gathered from each respondent and used to construct a population profile. Respondents were asked two questions at the start of the study to investigate perceptions regarding human rights and the right to food and nutrition. The first aimed to assess if participants thought it important for dietitians to have knowledge of the right to food and nutrition. Answers were in the form of a 4-point Likert scale with graded responses from strongly agree to strongly disagree. The second question was open-ended and related to understanding of human rights and the right to adequate food and nutrition at the start of the study. Answers were summarised (see section 3.3.2).



### 2.7.2 *Pre- and post-test: (Addenda D and E)*

The identical pre- and post-test contained 37 questions. Various question styles were used including true/false, multiple choice, open-ended as well as questions assessing participants' expectations of the e-learning course (pre-test) and their experience after completion (post-test). Tests were marked using a marking rubric developed for this study (Addendum I). Participants needed to achieve a pass mark of 70% (standard practice for online CPD articles) to receive CEUs.<sup>79</sup>

### 2.7.3 *Course evaluation form (Addendum F)*

A course evaluation form (Addendum F), provided valuable feedback on the course as well as suggestions on how it can be improved upon. The evaluation form consisted of four sections assessing planning, working methods, conduct and content. Answers were in the form of a 7-point Likert scale with graded responses ranging from strongly disagree to strongly agree. Participants were also asked to provide general observations (positive and negative) and comments about the e-learning course.

## 2.8 **Analysis of data**

Demographic data was captured using Microsoft Excel. Furthermore, data generated through SurveyMonkey was exported as Excel spreadsheets. With the assistance of a statistician, collected data was statistically analysed using STATISTICA version 10. Descriptive statistics were used to describe dietitians working in South Africa and their perceptions of human rights and its application to nutrition at the start of the study.

In the development of the pre- and post-test, it was essential to assess concordance between the questions, which was done by repeating the pre-test two weeks apart during the pilot process. Thereafter an agreement analysis was performed on the two sets of test scores. Lin's concordance correlation coefficients were estimated, as well as the Bland and Altman limits of agreement. The Bradley-Blackwood test was also done as part of this agreement analysis as a test for equality of the means and variances of the scores at the two time points. A p-value of  $p < 0.05$  will represent statistical significance in all hypothesis-testing procedures.

Open-ended feedback questions were summarised and analysed by the researcher. After carefully reading and re-reading the text, main themes were established around key concepts. These main themes were tied back to the applicable research questions and objectives in the final discussion.

Completed course evaluations forms were analysed by accessing participants graded positive and negative answers to determine how they perceived the course and ways in which it could be improved upon. Answers were in the form of a 7-point Likert scale, were analysed using Microsoft Excel and presented in the form of bar graphs.

## **2.9 Ethical and legal aspects**

### *2.9.1 Ethics committee*

The study was approved by the Health Research Ethics Committee at the Faculty of Medicine and Health Sciences, Stellenbosch University (Reference number S17/01/020) [Addendum JJ] and was conducted according to ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

Approval was sought from a representative of the FAO for the use of “A Primer to the right to adequate food” e-learning course and as well as the Faculty of Medicine and Health Sciences Undergraduate Committee to use 3<sup>rd</sup> year dietetic students for the pilot study.

### *2.9.2 Participant confidentiality*

Informed consent was obtained from all participants via electronic submission of signed consent forms and strict confidentiality maintained throughout the research process. Participants were not required to provide their names and remained anonymous to the researcher. The research assistant randomly allocated participation codes, unknown to the researcher, which were emailed to participants. Participant codes were automatically generated and comprised a randomly allocated letter from the alphabet and six numbers, such as O605315. In this way, the researcher could not link results of the pre- and post-test to individual email accounts thereby retaining participants’ anonymity. General information pertaining to the completion of the course was also sent via email to all participants. The research assistant linked email addresses and participant codes after all questionnaires and tests were completed in order to award 16 CEUs (Level 2: Ethics).

Participation was voluntary and participants were free to withdraw from the study at any point.

By making use of the SurveyMonkey platform, participants were unable to access tests more than once nor make electronic copies thereof. There are however risks associated with the use of such an online survey tool including that of outsourcing data collection and storage to an external server.<sup>80</sup> Protection of data at all stages of the research process, from initial data collection through to storage, is vital to ensuring the confidentiality and anonymity of research participants.<sup>80</sup>

## CHAPTER 3: RESULTS

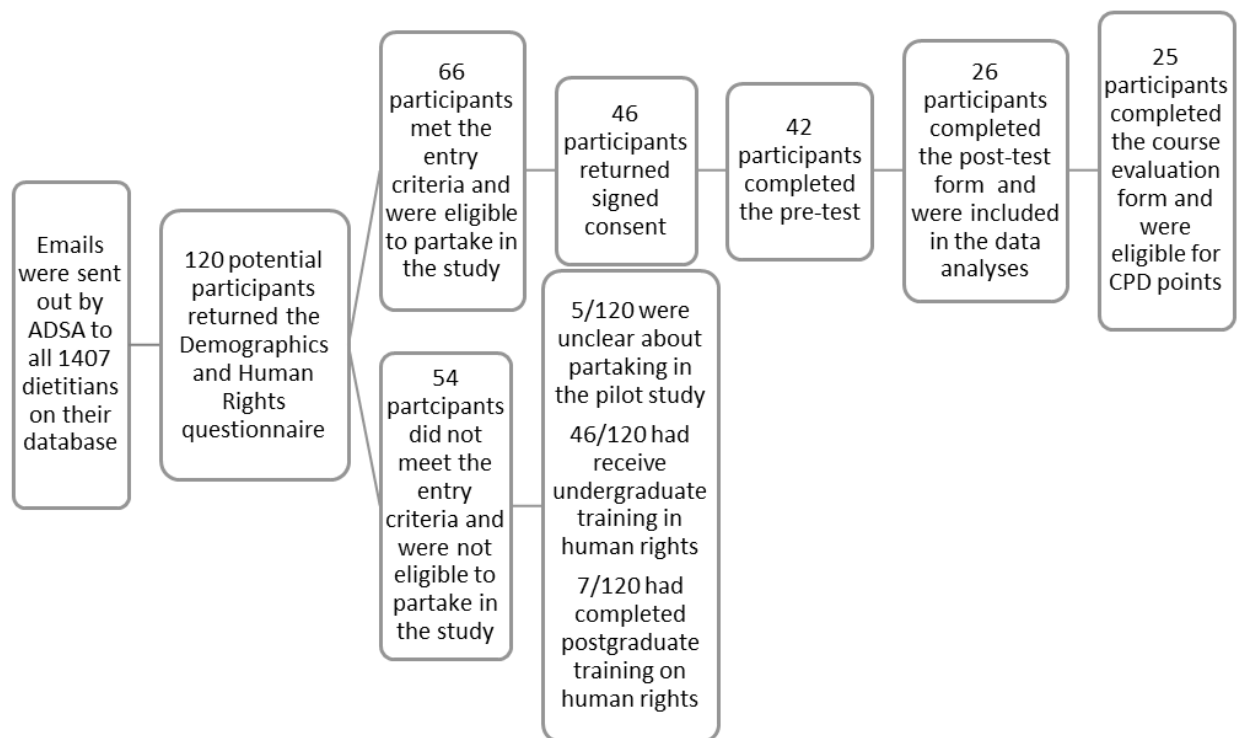
### 3.1 Introduction

The aim of the study was to investigate the suitability of a “Right to Food” e-learning tool compiled by the FAO to improve South African dietitians’ knowledge and understanding of the right to adequate food.

Qualitative and quantitative methods were used for data collection using research tools appropriate for this study. This chapter serves to present the results which will be reported in accordance with the research objectives.

### 3.2 Recruitment of participants and participation rates

The summary below (Figure 3.1) gives an overview of the recruitment process of participants and participation rate at various stages of the study.



**Figure 3.1: Summary of recruitment of participants and participation rate**

### 3.3 The reliability of research tool used to assess if an improvement in knowledge and understanding took place

The first objective of the study was to develop a questionnaire to assess if an improvement in knowledge and understanding took place after dietitians had completed this e-learning course. A pre- and post-test was developed (as outlined in section 2.7.2) for this purpose.

#### 3.3.1 Reliability of research tools

In order to determine reliability, participants in the pilot study completed the pre-test two weeks apart. Results of the Cronbach's alpha test to determine internal reliability between the pre- and post-test at the two time points was good, with reliability of  $\alpha > 0.7$ . All items had good correlation with the overall score (mean of the items). For the purposes of analyses, questions 26, 29 and 31 were excluded from both time points since they had no variability. Some items are negatively associated with the mean score. Cronbach's alpha test was used to measure the reliability of true and false questions as advised by the statistician.

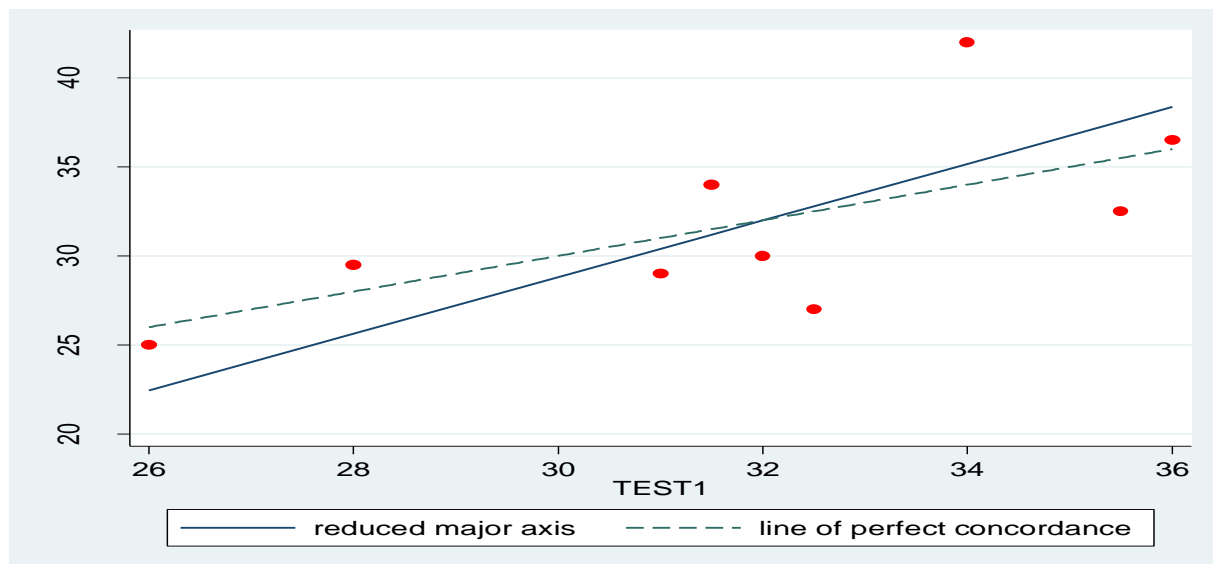
#### 3.3.2 Validity of research tools

To assess concordance (agreement or consistency) between the pre- and post-test scores completed two weeks apart (test 1 and test 2) and hence validity of the research tools, an agreement analysis was performed. Results are summarised in Table 3.1.

**Table 3.1: Validity testing performed using data from the questionnaire completed at two-time intervals (test 1 and test 2)**

Statistical test performed	Data used				Result
Lin’s concordance correlation coefficient	Stats	Test 1	Test 2	Difference	-0.544
Bradley-Blackwood paired sample test performed on results from test 1 and test 2	Mean	31.8	31.7	-0.1	0.6 (F = 1.474
	Standard Deviation	3.3	5.2	3.9	[P = 0.29231])
Bland and Altman (Limits of Agreement)	Average		0.111		Between -7.5 and 7.7
	Standard Deviation		3.9		

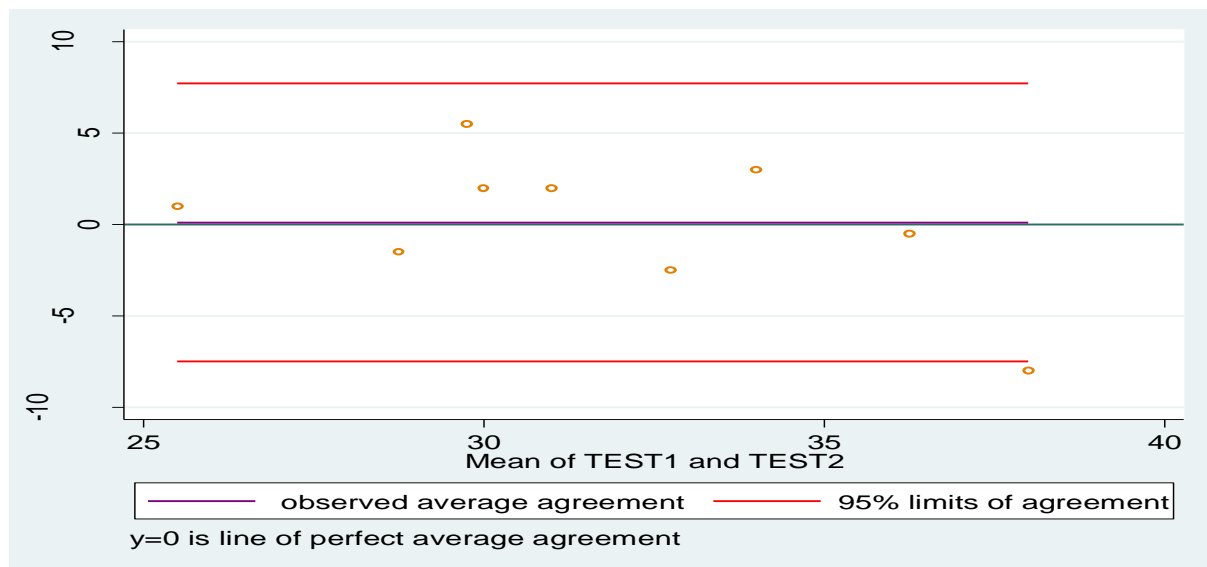
The Lin's concordance correlation coefficient is an index of how well a new test or measurement reproduces a gold standard test or measurement. It calculates the agreement between these two measures of the same variable.<sup>81</sup> In other words, do the scores from test 1 agree with the scores of test 2 and as a result, is the research reliable? The Lin's concordance correlation coefficient for measuring the agreement between difference and mean was -0.544 indicating a modest agreement. In Figure 3.2 regression to the mean is visible from the plot as participants with low scores for test 1 scored higher during test 2 and vice versa. Once again tests were only performed on true and false questions.



**Figure 3.2: Level of agreement between test 1 and test 2 using Lin's concordance correlation coefficient**

The Bradley-Blackwood test was also performed as part of this agreement analysis to test equality of the means and variances of the scores at the two time points.<sup>82</sup> The analysis showed that the concordance correlation is 0.6 ( $F = 1.474$  [ $P = 0.29231$ ]), which is a modest agreement. A 0 value for this test indicates no agreement, and the -1 indicates perfect agreement (Table 3.1) for true and false questions. Limits of agreement using Bland and Altman, estimate the interval within which a proportion of the differences between measurements lie. The limits of agreement include both systematic (bias) and random error (precision) and provide a useful measure for comparing the likely differences between individual results measured by two methods.<sup>83</sup> In Figure 3.3 the limits of agreement for true and false questions are

between -0.75 and 7.7 therefore indicating that there was no bias, as wide limits can be  $\pm 8$  units of the score.



**Figure 3.3: Limits of agreement between test 1 and test 2 using a Bland and Altman plot**

In summary and based on the above three measures of reliability, the research tools were deemed to be moderately reliable and without bias.

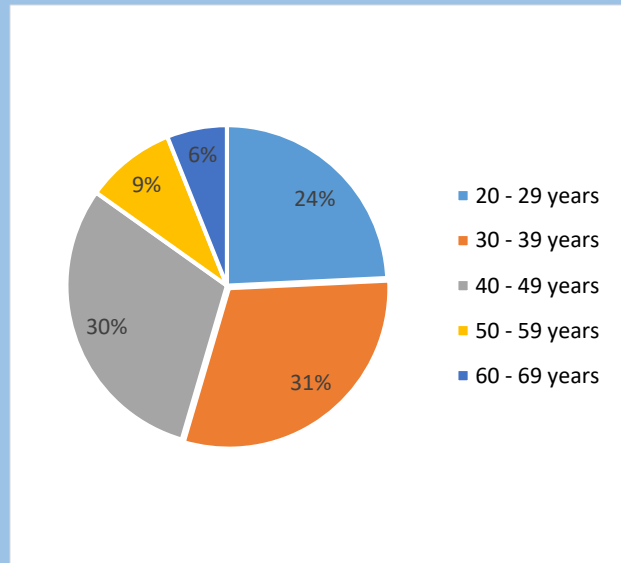
### **3.4 Description of the perceptions of dietitians regarding human rights and the right to adequate food and nutrition before the study started**

#### *3.4.1 Demographics of study participants*

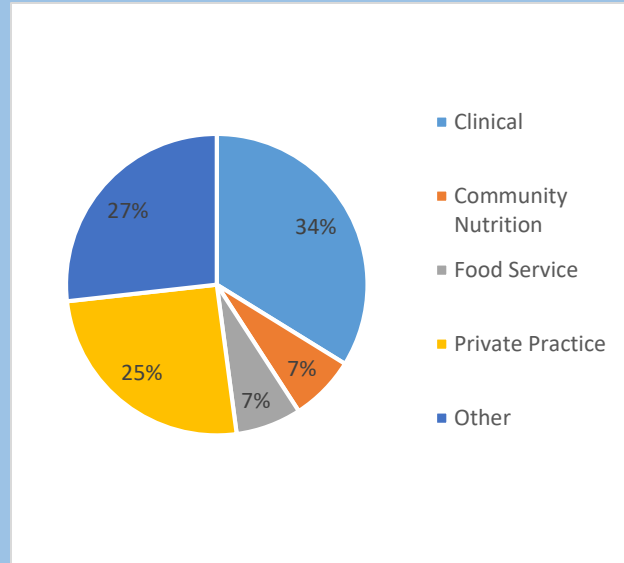
ADSA, on the request of the researcher, sent 1407 dietitians emails informing them of the opportunity to complete the course and attain CEUs. Convenience sampling was used to recruit 120 registered dietitians as potential participants. Five, were excluded because they were unclear whether or not they partook in the pilot study, 46 received undergraduate training about the right to food and seven completed some form of postgraduate training in human rights. The remaining 66 participants who met the inclusion criteria were enrolled into the study, rendering a participation rate of 4.6% (Figure 3.1).

Information obtained from the Demographics and human rights questionnaire (Addendum B) completed by 66 participants who indicated that they were interested in doing the online course, was used to create

a participant profile. The age of the participants ranged from 23 to 61 years (mean = 39 years), mostly in the age category 30-39 years (Figure 3.4). The majority (96.7%) of participants were women (n = 64) and worked in various areas of dietetics (Figure 3.5).



**Figure 3.4: Age distribution of study participants (n=66)**



**Figure 3.5: Area of Dietetics study participants currently work in (n=66)**

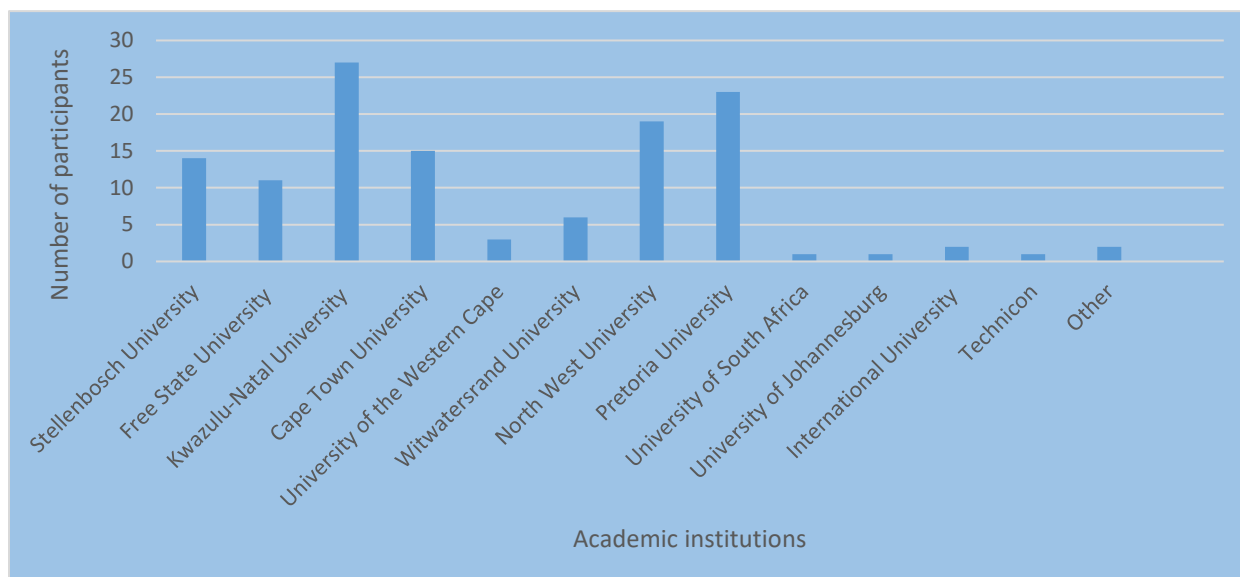
The majority of dietitians (34%; n= 24) indicated they work mostly in a clinical area in the public sector (Figure 3.4), followed by 27% (n=19) who worked in “other areas” (Table 3.2) and 25% (n=18) were private practicing dietitians.



**Table 3.2: Dietitians (n=37) working in areas other than clinical nutrition, community nutrition and food service**

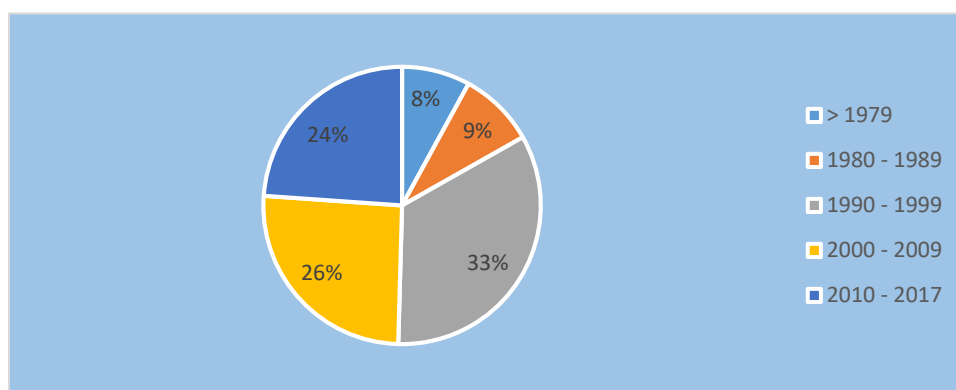
Other area of work	Number	%
Intermediate care	1	1.5%
Industrial nutrition in mines	1	1.5%
Pharmaceutical company	3	4.5%
Currently unemployed	3	4.5%
Lecturer/educator/researcher	6	9.1%
Student/studying	2	3%
Medical and scientific affairs manager	1	1.5%
Non-Governmental Organisation	2	3%
<b>TOTAL</b>	<b>19 out of 66</b>	<b>27%</b>

Study participants were asked to provide information on where they received their undergraduate and postgraduate degrees. Degrees and additional certificates were received from a range of academic institutions with the vast majority from the University of KwaZulu-Natal (n=27) and the University of Pretoria (n=23). Qualifications of participants included BSc in Dietetics, postgraduate diploma in Dietetics, Masters of nutrition, and doctoral degrees. Three participants reported that they had obtained the additional qualification of certified lactation consultant (Figure 3.6). Due to the fact that some participants completed the 4-year accredited entry level degree while others completed a degree plus a relevant post graduate diploma, “n” is more than 66. In this instance, n, refers to number of qualifications and not the number of participants.



**Figure 3.6: Academic institutions where dietitians received undergraduate and postgraduate degrees and additional qualifications.**

Undergraduate and postgraduate degrees were received by participants between 1975 and 2017 with the most prolific years being 1990 to 1999 (33%) and 2000 to 2009 (26%) (Figure 3.7). Thirteen participants did not respond.



**Figure 3.7: Decade during which study participants (n=53) received undergraduate and postgraduate degrees and additional qualifications**

### 3.4.2 Perceptions of human rights

The first part of the study aimed to establish dietitians' general understanding of human rights and the right to food, as this could be an indication of the need for training about this topic. In the Demographics and human rights questionnaire (addendum B), study participants were asked whether they think it

important for dietitians to have knowledge and understanding of human rights principles. Using a 4-point Likert scale, all dietitians agreed (n=33%) or strongly agreed (n=67%).

Dietitians were asked to describe, in their own words, what the right to food and nutrition meant to them. Responses are summarised below according to common themes (Table 3.3). The most common theme mentioned by many dietitians was the link between the right to adequate food and nutrition and the provision of foods that meet basic needs to maintain a healthy life, prevent disease and hunger.

“Everyone has the right to adequate and nutritious food to provide the correct amount of energy and nutrients without having to go hungry.”

“It means that all people no matter the circumstance should have the right to have access to food that will meet their nutritional requirements to prevent malnutrition or illnesses.”

Dietitians also made the connection between the right to adequate food and nutrition and the conditions required:

“People should have access to food that is readily available, provides sufficient nutrition for their requirements, and ability to ensure that food is available at all times i.e. food security.”

Equal access to all was another common theme identified:

“As according to the constitution (Bill of Rights) everyone has the right to secure food and water. Adequate food means to me enough secure food to meet the nutritional requirements of the person. That does not mean necessarily according to their choice, but rather according to their needs.”

Furthermore, the issue of food provision for those who are unable to provide for themselves was also identified:

“All people should have sufficient food to them so that they can feed themselves effectively to remain healthy. If sufficient food supply is not available to the population of a specific country government should intervene through whatever means necessary to provide for their citizens.”

**Table 3.3: What the right to adequate food and nutrition means to dietitians – themes and relevant issues reported**

Main themes	Relevant issues reported
Meets basic needs to maintain a healthy life, prevent disease and hunger	<p>"Everyone has the right to adequate and nutritious food to provide the correct amount of energy and nutrients without having to go hungry."</p> <p>"It means that all people no matter the circumstance should have the right to have access to food that will meet their nutritional requirements to prevent malnutrition or illnesses."</p> <p>"The access to food to ensure minimum requirement to sustain normal activity at certain times of life."</p> <p>"People have the right to eat wholesome and nutritious foods in adequate quantities that can support a healthy lifestyle."</p> <p>"Access to a variety of culturally acceptable affordable foods and for each family member to be able to enjoy that food in a satisfying amount. For me adequate would mean nutritionally complete balanced as well as adequate sufficient amount to support growth and provide satiety."</p> <p>"The right to adequate food means affordable access to nutrient dense foods that will sustain healthy growth and development."</p> <p>"...no person should starve to death."</p> <p>"It is one of the basic human needs for survival."</p> <p>"It entails the right we as humans have to sustain our biological lives and maintain or support our health through the fulfilment of basic needs. Adequate nutrition to do this should be a right to all, regardless of socio-economic standing. The right to life through access to food should be non-negotiable. "</p>
Equal access...	<p>"As according to the constitution (Bill of Rights) everyone has the right to secure food and water. Adequate food means to me enough secure food to meet the nutritional requirements of the person. That does not mean necessarily according to their choice, but rather according to their needs."</p> <p>"Food security for all..."</p> <p>"This means that individuals and families have access to enough good quality food to remain well-nourished and healthy."</p> <p>"It means the basic right to food whoever and wherever you may be, in order to be able to achieve optimal, if not minimal health status, in order to survive."</p> <p>Every individual has the right to live a long, healthy life without having the lack of resources to obtain the food needed throughout their lifespan."</p>
Accessible, adequate, sustainable, safe and affordable	<p>"The right to adequate food means that everybody has the right to have access to enough and adequate food."</p> <p>"People should have access to food that is readily available, provides sufficient nutrition for their requirements, and ability to ensure that food is available at all times i.e. food security"</p> <p>"Having continuous access to safe, nutritious, affordable, acceptable and accessible food supply."</p> <p>"Availability and access to affordable, nutritious foods for all."</p>
Equal access to all regardless of socio-economic status	<p>"Access to safe and nutritious food (and water) should not depend on current social status, but be provided in adequate amounts in food in-secure families with attention to self-improvement and not complete reliance on handouts."</p> <p>"Every person should be able to buy or grow their own food at reasonable prices. The government should contribute with money/resources to make this happen."</p>

Provision to those who cannot provide for themselves	<p>"I suppose simply it means that everyone – no matter where we come from, what race/colour we are, and what our financial status is or religion etc... we all should have equal access to food. It is wrong that adults and children have no food/water. It is a basic need for everyone for survival and plans should be made that everyone can get nutrition. Malnutrition in today's modern living should not be an issue."</p> <p>"Sufficient access to adequate food to support basic nutritional and growth needs, and if it is not possible, then the greater community should offer support to provide these basic needs."</p> <p>"All people should have sufficient food to them so that they can feed themselves effectively to remain healthy. If sufficient food supply is not available to the population of a specific country government should intervene through whatever means necessary to provide for their citizens. "</p>
Basic needs	<p>"Every human has the right to a food. Nutrition is one of the basic needs of any living organism. Basic needs should be provided for in all communities. It is stated very clearly in Maslow's Hierarchy that Food is a basic need."</p> <p>"Addressing the primitive need for food, based on Maslow's Hierarchy of Needs."</p>
Affordability	<p>"Each person has the right to have access to clean and nutritious food. Where financial implications fit in, I am not sure..."</p> <p>"Food that is safe, ethical, and nutritious must be available to all at a reasonable cost and those that are less fortunate should be assisted by governments and have access to adequate nutrition, whether in via food have access to adequate nutrition whether in via food stamp programs or subsidies."</p> <p>"The right to eat a healthy balanced diet that is not taxed and too expensive to buy..."</p> <p>"The right to adequate food includes access to healthy food, with the appropriate nutritional content, at an affordable cost, available to all. Access and affordability are important aspects of the right to food and "healthy eating" should not be restricted to those who are able to pay inflated costs."</p> <p>"Every person should be able to buy or grow their own food at reasonable prices. The government should contribute with money/resources to make this happen."</p>
Dignity	<p>"Life, health, human dignity, feeding children equates with feeding our future leaders i.e. investing in our future."</p>

### 3.5 Determine whether an e-learning tool can improve dietitians' knowledge and understanding of the right to food and nutrition concepts

The researcher received 120 completed Demographics and human rights questionnaire (8.5% response rate). Of those, 66 (55%) met the entry criteria and 54 (45%) did not. Details on which criteria was not met are as follows: five dietitians (9.2%) were unclear about their participation in the pilot study, 46 (85.2%) had received undergraduate training in human rights and seven (12.96%) had completed postgraduate training on human rights. Some participants fell into more than one of the above-mentioned categories.

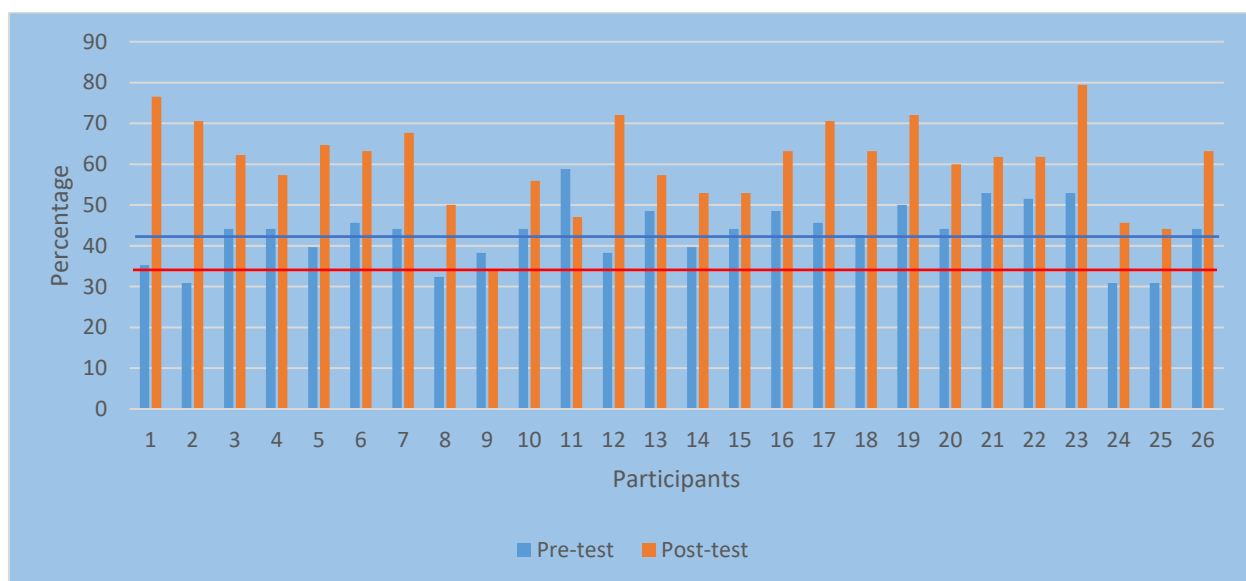
Of the 66 eligible participants who completed the Demographics and human rights questionnaire and who met the entry criteria, 46 (69.7%) returned signed consent forms (Addendum C) and 42 (63.6%) completed the pre-test. Of the 42 participants who started the course, 26 (61.9 %) completed the post-test. While most participants gave no reason for failing to complete the course, one fell ill during the study and

another emailed to say she had missed the deadline but did not provide a specific reason. All but one of the remaining participants who started the course (n=25) completed the course evaluation form resulting in a completion rate of 59.2%. These participants were eligible for CPD points.

Although the initial response rate was 120 out of the 1407 dietitians registered on ADSA (2.57 %), the final response rate was only 25 participants (0.53 %). As 26 out of the eligible participants (n=66) completed the course, the completion rate was 39.4%.

### 3.5.1 *Participants' improvement in knowledge regarding the right to adequate food and nutrition*

Pre- and post-tests (n=26) were marked by the researcher using a marking rubric (Addendum I) designed specifically for this study. Both tests carried a maximum score of 68. Figure 3.8 shows the average score for the pre-test at 29.34 out of 68 (34.32%) with a minimum score of 21 (30.88%) and maximum of 40 (58.82%).



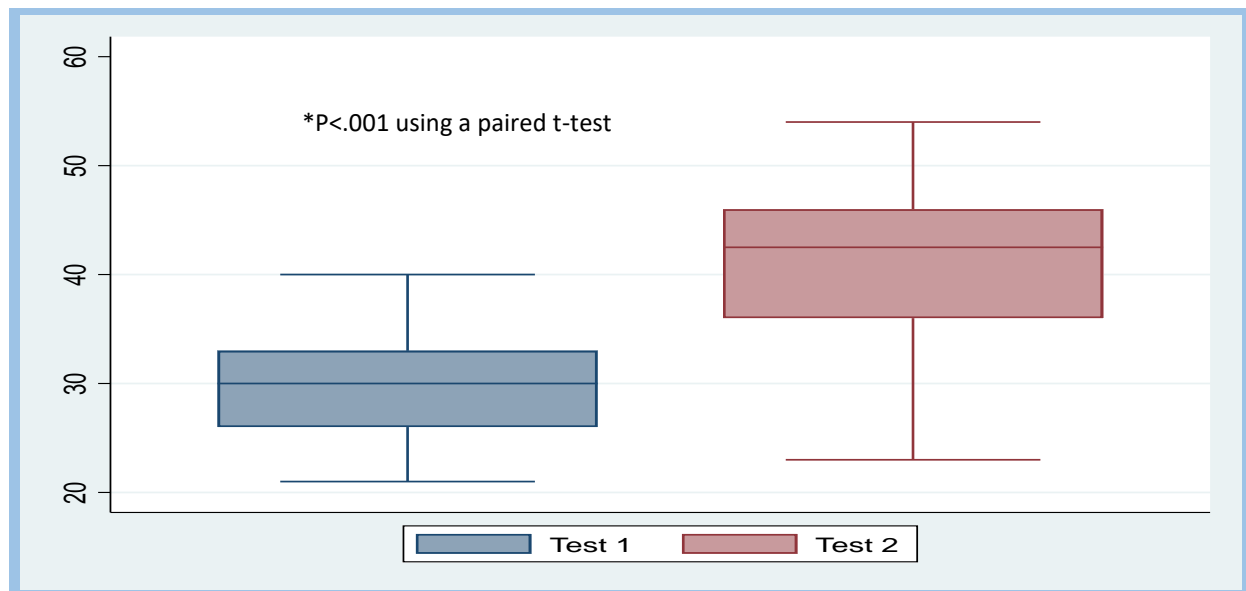
**Figure 3.8: Difference in percentage achieved in the pre- and post-test**

Table 3.4 shows that the mean at the post-test increased to 41 (60.29%) with a minimum and maximum score of 23 (33.82%) and 54 (79.41%) respectively, representing movement towards the 75<sup>th</sup> percentile. Although only five participants achieved the minimum score of 70% to attain CEU's, 22 participants achieved scores above 50%.

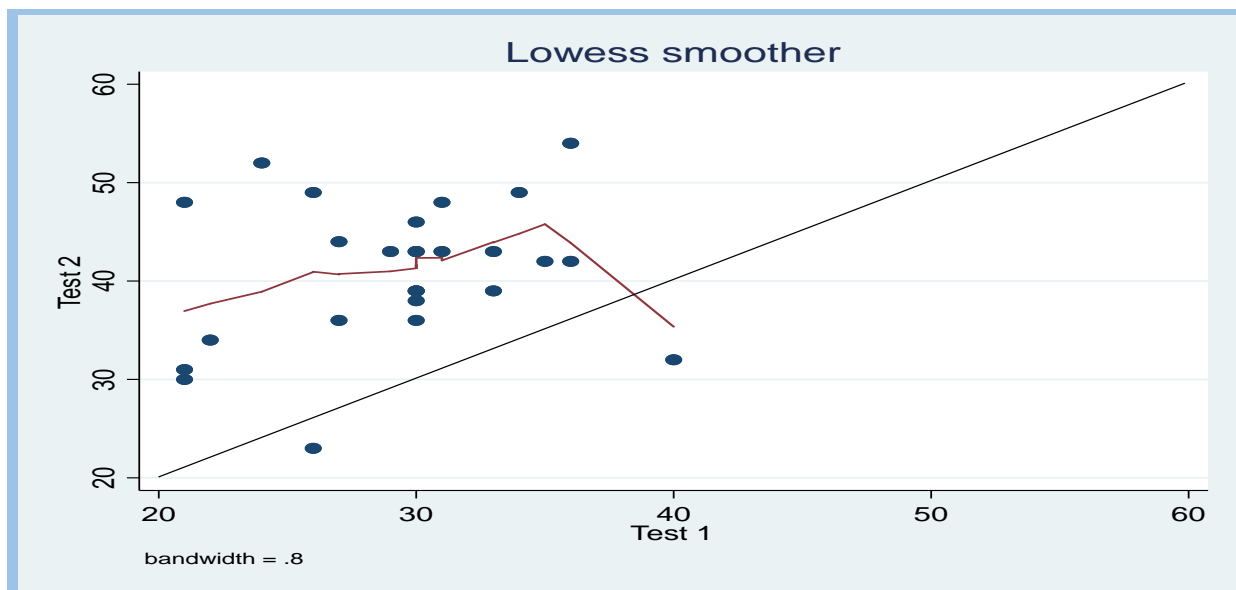
**Table 3.4: Summary of the pre- and post-test results analysis**

Variable	Mean	Standard Deviation	Minimum	Percentile 25	Percentile 50	Percentile 75	Maximum
Test 1 (pre-test)	29.34	4.96	21	26	30	33	40
Test 2 (post-test)	41.00	7.26	23	36	42.5	46	54
Variance	12.04	7.94	-8	8	12	17	28

Total scores were compared using a paired t-test. Results show a significant increase in knowledge regarding the right to food from the pre-test to the post-test with a clear shift in scores (Figure 3.9).

**Figure 3.9: Improvement in knowledge from pre- to post-test\***

Using a Lowess Smoother Scatterplot (Figure 3.10) of the pre-test versus the post-test, most of the scores lie above the diagonal indicating that the score for the post-test is greater than that of the pre-test. It must be noted that two participants scored worse on the post-test. The results of the paired t-test show that there is a significant increase in score of participants in the post-test, ( $p < 0.001$ ). The estimated increase in score is 11.7 units (95% CI: 8.5 to 14.8).



**Figure 3.10: Comparing scores between pre- and post- test\***

### Null hypothesis

Due to the significant increase in knowledge ( $p < 0.001$ ) from the pre- to the post-test it is possible to reject the null hypothesis that the FAO e-learning course does not improve the knowledge and understanding of dietitians in South Africa regarding human rights and the right to adequate food and nutrition.

### 3.5.2 Participants' expectations and experience of the course

Participants were asked open-ended questions investigating their expectations of the course before it commenced. Upon completion of the course, participants were again asked open-ended questions investigating how they experienced the course, what they found to be the most significant learning and what, if anything, they would incorporate into their daily work. The researcher established a list of main themes around the key concepts (Tables 3.6-3.9).

#### 3.5.2.1 Participants' expectations before starting the course

At the end of the pre-test (Addendum D) participants were asked what their expectations for the e-learning course were (Table 3.5). The main theme identified was that participants wanted to improve their knowledge around existing programmes regarding human rights and the right to food and nutrition as reflected in the following quote:

“I hope to gain in depth knowledge and a better understanding of issues around food insecurity, policies and intervention programmes in Sub-Saharan Africa to



address this and best practice to implement as part of intervention programmes in low-resource urban African environments in South Africa.”

This was in relation to actual subject matter as well as understanding their role as dietitians, laws, regulations and legal frameworks around human rights and the role of governments in supporting human rights. Other participants were interested in how information could be transferred to others, including students and clients: “I hope that this will help me in my practice to better educate and serve the public.” Only two participants specifically mentioned that receiving CEUs was an incentive for participating in the study.

**Table 3.5: Themes and relevant issues from participants on their expectations of the course**

Main themes	Relevant issues reported
Better understanding their role as dietitians regarding human rights and the right to food	<p>"How I can contribute as a Dietitian."</p> <p>"I would like to be aware of the programmes on offer in the country to support human rights and as a dietitian to understand our role in ensuring this is maintained."</p>
Improved knowledge of laws, regulations and legal frameworks	<p>"To be more informed regarding the rights and regulations regarding food security. It is important especially for us working within the field of nutrition to be aware of the legal side as we encounter food insecurity daily."</p> <p>"To learn about the Human rights law - because I know very little about it."</p> <p>"To gain insight on the different laws regarding the access to food."</p> <p>"To increase my knowledge of the Human Rights in South Africa as well as on the Constitution in South Africa with regards to food security. "</p>
Awareness of existing programmes	<p>"I hope to gain in depth knowledge and a better understanding of issues around food insecurity, policies and intervention programmes in Sub-Saharan Africa to address this and best practice to implement as part of intervention programmes in low-resource urban African environments in South Africa."</p> <p>"I would like to be aware of the programmes on offer in the country to support human rights..."</p>
Educating others	<p>"I hope that this will help me in my practice to better educate and serve the public."</p> <p>"To develop an understanding of and knowledge about the right to food in order to better serve socioeconomically disadvantaged communities in SA."</p> <p>"To have more knowledge to use in the education of students."</p> <p>"To pass this on to those I teach."</p>
CEUs	<p>"To earn CPD points."</p> <p>"...and to be honest, I need the ethic CPD points."</p>

### 3.5.2.2 Participants' experience of the FAO right to food e-learning course

On completion of the e-learning course, participants were asked about their experience. Five main themes were identified (Table 3.6) and in general, participants found the course "insightful, informative and interesting". Some mentioned that the content was difficult to conceptualise and complex in nature, while others choose to speak about the course design elements. Participants appreciated the self-paced nature that e-learning offers, easy access to course material and adequate time allocation.

"It was an ideal platform in which to study and I liked that I was able to access and learn when I had free time. There were never any issues with accessing the course and the slides were well presented and the illustrations suitable."

Others felt the amount of content was difficult to cover because “there was so much information to take in over a short period of time.” Some participants had suggestions on how course presentations could be improved upon: “I did note that the course was set ~2007, and thus, although still wholly relevant, should be updated - both content and course layout/set up. “

As explained in the methodology chapter, the e-learning course for this study comprised the original FAO developed e-learning tool plus an additional study unit on General Comment No. 12. Furthermore, study unit 7 was expanded by providing five articles relevant to South Africa to enhance understanding of the right to food in practice. However, one participant specifically mentioned in her feedback that the last part was very confusing when the SA information was just attached to the course in the end. Other participants remarked that though the course stimulated their desire for further learning, the time between when course work was completed and the post-test was too long and one participant mentioned struggling with language comprehension.

**Table 3.6: Themes and relevant issues from participant's experience of the course**

Main themes	Relevant issues reported
Course content – general findings	<p>"The various lectures were interesting and provided much information."</p> <p>"It was an enriching experience as it was the first time I learned more about the Right to Food, especially in the context of South Africa."</p> <p>"Very informative - a lot of information but well conducted. Will need to go through everything again to ensure I have gained all attainable knowledge."</p> <p>"Thoroughly enjoyed this course and learnt a lot."</p>
Course content – difficult concepts	<p>"It was difficult for me to comprehend as I am not the most philosophical orientated person."</p> <p>"It was ok, lots of boring and complex concepts."</p> <p>"A lot of intense content..."</p> <p>"The concepts are not always well described and therefore it is not always clear whether your understanding is correct or not."</p>
Course design – self paced/easy to access/adequate time	<p>"Due to it (the course) being self-paced, it allows you time to absorb and digest the subject matter."</p> <p>"It was an ideal platform in which to study and I liked that I was able to access and learn when I had free time. There were never any issues with accessing the course and the slides were well presented and the illustrations suitable."</p> <p>"It was well-paced, and the option of setting own pace over the time period was appreciated."</p> <p>"I found it very well organised - easy to access and read."</p> <p>"Convenient to be done in own time."</p> <p>"It was very interesting and much easier doing it on my own time and in my own space."</p> <p>"...easy to access via the internet."</p>
Course design – inadequate amount of time	<p>"There was so much information to take in over a short period of time."</p> <p>"A lot of reading to get through within the duration of the course."</p>
Course content – length of sessions	<p>"Some of the sessions were a bit long, as it is a lot to take because it is new concepts."</p>
Course design – presentation of the course	<p>"Slides were well presented and the illustrations suitable."</p> <p>"I did note that the course was set ~2007, and thus, although still wholly relevant, should be updated - both content and course layout/set up. "</p> <p>"...the course material is not well-laid out and is sometimes difficult to understand."</p>
Course design – addition of South African content	<p>"However, the last part was very confusing when the SA information was just attached to the course in the end."</p>
Stimulating further learning	<p>"I would most definitely do the other courses on this website also if possible. It really stimulated my mind to learn again. It was difficult to get started, but as soon as I started it was much easier to continue."</p>
The time between course work and completion of the post-test	<p>"A major problem was I read all the material soon after receiving it and by the time the post-test arrived I could not remember much of it. I did not have time to reread it all."</p> <p>"I must mention that the post test was very difficult to complete as the 7-course material were completed over a period of a few weeks and I couldn't remember all of the details."</p>
Language difficulty	<p>"I am not sure in what way the use of English as medium was responsible for my struggles as I am not the most fluent person in English."</p>

### 3.5.2.3 *Participants' responses regarding the most important new knowledge obtained*

Responding to a question on what new knowledge was most valuable during the course, participants noted the responsibility of government towards realising people's right to food and the significance of a rights-based approach:

"I have heard of all the laws and problems and food insecurity before but it is nice to know that it is also the government's responsibility to provide food for all..."

"The most significant thing I learnt was the human rights-based approach and how that should be used to develop a process/programme."

Another common sentiment was the relationship between hunger, food security and the right to food as reflected in this quote:

"What again struck me was how big the incidence of hunger is in our world and how much should be done to counter it. The difference between right to food and food security also struck me..."

Participants commented on wanting to get involved in realizing people's right to food and nutrition and saw it as a call to action:

"We cannot sit idly by and expect the outcomes that are needed without trying to get involved at some level..."

One participant summarised her sentiment about the right to food in SA as follows:

"Although the right to food is enshrined in South Africa's constitution, as a country we haven't done a very good job of realising it. There were initiatives attempted that I wasn't aware of, and it's also clear that not all government departments are "nutrition sensitised" since some policies can be at odds..."

Other common themes (Table 3.7) included learning about human rights principles, an understanding that the right to food is not about feeding people directly or giving handouts, the legal framework, individual rights, human rights and right to food and nutrition violations. One participant found "the entire course was new to me - every aspect was significant."

**Table 3.7: Most valuable aspect of the course as identified by participants and relevant issues**

Main themes	Relevant issues reported
Role of government	<p>"I have heard of all the laws and problems and food insecurity before but it is nice to know that it is also the government's responsibility to provide food for all, and not to withhold food in warfare conditions."</p> <p>"The role of the government."</p> <p>"The responsibility of the government..."</p>
Rights-based approach	<p>"The most significant thing I learnt was the human rights-based approach and how that should be used to develop a process/programme."</p> <p>"The integration of multiple departments..."</p> <p>"The importance of cultural and religious aspects to the right to food was significant."</p> <p>"I learned that the right to adequate food needs to be a multi-dimensional approach."</p>
Hunger, food security and the right to food	<p>"What again struck me was how big the incidence of hunger is in our world and how much should be done to counter it. The difference between Right to food and Food security also struck me as the development of the person as individual is important."</p> <p>We all have the right to be free from hunger but also we need to do our part."</p> <p>"The important of food security and the fact that there are so many ways that it can be enforced."</p> <p>"That there is much to be done to promote food security. Knowledgeable people should be incorporated to assist with the malnutrition situation in SA."</p> <p>"To learn more about the human rights and what it means to be free from hunger vs food security was valuable."</p>
Human rights principles	<p>"The history of human rights and how I can apply it."</p> <p>"Realised the importance of basic human rights for every individual as well as the obligation by every individual and the state."</p> <p>"The interconnectedness and interrelatedness of all human rights."</p> <p>"I was not aware of all the time, research and effort that is/has being done over all these years to protect the rights of people to adequate food."</p> <p>"That the right to food forms part of other basic human rights of all humans."</p> <p>"It was valuable to learn about the human rights-based approach to development, to implement it in all actions etc. as my belief is that it is often overlooked."</p>
Call to action	<p>"That we cannot sit idly by and expect the outcomes that are needed without trying to get involved at some level because implementation and ongoing monitoring is key."</p> <p>"That we all have a responsibility towards making sure that everyone has access to food - whether it is by providing or taking better care of the environment/wasting."</p> <p>"So much more needs to be done and we on the ground can really help by being a voice."</p>
The right to food is not about feeding people directly our giving handouts	<p>"Empowering the vulnerable to feel that they are providing for themselves - not only relying on government handouts."</p> <p>"It is not just about the government giving food to the hungry."</p>
Human rights development and progress in South Africa	<p>"Although the right to food is enshrined in South Africa's constitution, as a country we haven't done a very good job of realising it. There were initiatives attempted that I wasn't aware of, and it's also clear that not all government departments are "nutrition sensitised" since some policies can be at odds with e.g. what Department of Health mandated to do."</p> <p>"It was interesting to understand how South Africa has taken steps to improve individual's right to food."</p> <p>"There are many people who do not have access to food, despite the food being available, especially in South Africa."</p>

Legal framework	<p>“That there is a whole legal framework in place supporting the right to food with the various organizations and legal processes to support and ensure that individuals have the right to food.”</p> <p>“...the legal framework that surrounds this.”</p>
Individual rights	<p>“I learnt of the great deal of work done by so many organisations to ensure that every individual has the right to food.”</p>
Violations	<p>“I am also shocked to realise that these rights are very much violated on a daily basis.”</p>
Non-specific	<p>“The entire course was new to me - every aspect was significant.”</p> <p>“It's really hard to single out one aspect.”</p> <p>“Generally learning more about the topic.”</p>

#### *3.5.2.4 Value and relevance of knowledge incorporated into participants' current work*

Participants were asked if there was knowledge they would incorporate, from the course, into their work (Table 3.8). One participant indicated that “Currently I cannot incorporate anything but what it has done is made me want to involve myself as a community dietitian and be part of this move towards ending world hunger.” Another participants indicated that there were aspects of the course that they wanted to incorporate into their work as, “...there is a lot of interesting information that will form part of my lectures in future”.

**Table 3.8: Aspects of the course, as identified by participants, which could be incorporated into their daily work**

Main themes	Relevant issues reported
No	<p>"In my daily practice not much will be incorporated as I am working as dietitian in an upmarket area and am not confronted regularly by the need of food."</p> <p>"Currently I cannot incorporate anything but what it has done is made me want to involve myself as a community dietitian and be part of this move towards ending world hunger."</p> <p>"Not currently working..."</p> <p>"At this moment in time, I am not working so not able to incorporate what I have learned."</p> <p>"...does not apply to the work I do."</p> <p>"Nothing at this stage due to the field I am currently in. Participating was more for info purposes."</p> <p>"I am currently in private healthcare where I couldn't really incorporate anything, however I appreciate having a better understanding and knowledge of the right to food."</p>
Yes – Mindfulness	<p>"Be more mindful and aware of transgressions to the Right to food."</p> <p>"Trying to be more mindful of the human rights aspect of the right to food."</p> <p>"Perhaps make sure with every patient what their specific ability/situation regarding food and resources is before suggesting specific products."</p>
Yes - Policy and programme development	<p>"I am more conscious of using a human rights approach when developing policies and strategies."</p> <p>"I would like to work together with Occupational Therapists to help people be more independent."</p> <p>"It is important to have an understanding of how all other organisations / departments link and have responsibilities to work together on progressive realization of food security."</p>
Yes - Advocacy/teach others	<p>"Make people aware of their right to food (although I have not thought how this would happen)."</p> <p>"Mobilise resources where necessary."</p> <p>"Work against poverty."</p> <p>"I shall incorporate a bit of each of the lessons."</p> <p>"...there is a lot of interesting information that will form part of my lectures in future."</p> <p>"Do much more education."</p>
Yes - Attitude towards people	<p>"Respect my colleagues and patients."</p> <p>"The focus on a dignified development of the person who needs food is something to really give attention to."</p> <p>"Non-discrimination."</p> <p>"To put the individual first."</p> <p>"Paying more attention to individual human rights."</p>
Yes - Access to food	<p>"Promote vegetable gardens."</p> <p>"I would definitely focus more on sustainable programs for example, vegetable gardening and breastfeeding, rather than only supplementation."</p> <p>"To educate people to help other to buy their own food or produce their own food."</p> <p>"Not to with-hold food to people."</p> <p>"More knowledge of what people really eat."</p>



### 3.6 Course evaluation

At the end of the 8-week course and after completion of the post-test, participants completed a course evaluation form (Addendum f). The evaluation form consisted of four sections assessing planning, working methods, conduct and content of the programme. Answers were in the form of a 7-point Likert scale with graded responses ranging from strongly disagree to strongly agree, with a neutral midpoint. Results for 25 participants (one participant did not complete the course evaluation form), represented as percentages due to the small sample size, are presented in Table 3.9. One participant did not answer question 1.3 and another did not answer 3.3.

**Table 3.9: Course evaluation feedback from participants using a 7-point Likert scale**

Category and Statements	Percentage						
	DS	D	DL	N	AL	A	SA
<b>1. Matters relating to the planning of the programme</b>							
1.1 I received satisfactory information about the course prior to its commencement	0	0	4	0	4	40	52
1.2 The course plan, programme and objectives were adequately explained at the beginning of the course	0	0	4	4	0	44	48
1.3 It was clear that I could work at my own pace but needed to complete the material within a time frame	0	0	0	0	0	17	83
1.4 The time allowed to complete the course was adequate	0	0	4	0	0	20	76
<b>2. Matters relating to working methods and conduct of the programme</b>							
2.1 I found it easy to create a user profile on the Food and Agriculture Organisations website.	0	0	0	4	12	44	40
2.2 The online course material was simple to navigate.	0	0	0	0	12	32	56
2.3 The online study material was simple to follow and aided in the learning experience.	0	4	4	4	8	40	40
2.4 The learning objectives helped me to keep track of what I was expected to learn.	0	0	0	0	20	40	40
2.5 I found the distance learning aspect easy to adjust to and I prefer it to traditional lectures.	0	0	8	12	8	28	44
2.6 I enjoyed completing the course online.	0	0	0	8	8	44	40
2.7 Because the course could be completed online, I found it easy to fit into my schedule.	0	0	0	4	0	36	60
2.8 I would have preferred receiving hard copies of the study material.	24	32	4	12	16	0	12
<b>3. Matters relating to the content of the programme</b>							
3.1 The content of the course enhanced my human rights and right to food knowledge and understanding.	0	0	4	0	8	32	56
3.2 The study units followed a logical order.	0	0	0	8	4	48	40

Category and Statements	Percentage						
	DS	D	DL	N	AL	A	SA
3.3 I used the digital library to find additional information.	0	4	4	8	29	25	29
3.4 I shall use the digital library in the future.	0	4	0	16	12	36	32
3.5 The inclusion of General Comment No. 12 (study unit 8) enhanced my understanding of the right to food in practice.	0	0	0	4	20	32	44
3.6 The inclusion of General Comment No. 12 gave me a holistic understanding of the practical implementation of the right to food.	0	0	0	8	8	48	40
3.7 The additional literature on the right to food in South Africa strengthened my knowledge regarding the status of the right to food in SA.	0	0	0	8	4	44	48
3.8 I now have a greater understanding of the right to food in South Africa.	0	0	0	4	4	40	52
3.9 Dietitians should play a more active advocacy role for the right to food in South Africa.	0	0	0	4	4	40	52
<b>4. Assessment of the programme</b>							
4.1 I feel more equipped to advocate for the right to food.	0	4	0	4	12	52	28
4.2 The course gave me new knowledge and insight into the issues that need to be addressed.	0	0	0	0	16	48	36
4.3 The course has made me more appreciative of human rights and aspects that relate to my own specific area of work.	0	0	0	0	12	48	40
4.4 I would recommend this course to other dietitians.	0	0	0	4	12	28	56
4.5 All dietitians should complete the FAO course on human rights and the right to food.	0	0	0	4	24	28	44

**Legend:** DS = Disagree Strongly, D = Disagree, DL = Disagree a Little, N = Neutral, AL = Agree a Little, A = Agree, SA = Strongly Agree

### 3.6.1 Matters relating to the planning of the course

It is evident that the majority of participants were satisfied with the pre-course information (96%) as well as the explanation of the course plan, programme and objectives given at the beginning of the course (92%). Nearly all participants strongly agreed (83%) that it was made clear they would be required to work at their own pace, but that there were set deadlines for the completion of course material. Participant's responses regarding whether adequate time had been allocated to complete the course varied, one participant disagreed a little, while the rest agreed or strongly agreed. (Table 3.9)

### 3.6.2 *Matters relating to working methods and conduct of the course*

All 26 participants (100%) responded positively (Table 3.9) when asked if learning objectives helped keep them on track of what was expected of them and that course material was simple to navigate (84%) with more than a third (40%) strongly agreeing, substantiated by the comment: “I really found it interesting and easy to follow”. Nearly 90% of participants (Table 3.9) agreed that the online study material was simple to follow and aided in the learning experience. When asked if they would prefer to receive hard copies of study material, there were varied responses with 40% agreeing, and 60% disagreeing to some extent. There was one comment stating “hard copies don't need to be made in these times, as everything can be kept on a laptop/PC for easy access.”

The majority (96%) of participants agreed or strongly agreed that creating a user profile on FAOs website was easy. When asked if this online course was enjoyable, 88% agreed or strongly agreed and according to 96% of participants, because the course could be completed online, they found it “saved time and I could fit it into my schedule.” The majority (80%) of participants preferred the e-learning aspect of the course to traditional lectures: “An online learning experience allows for flexibility which is important in this day and age”.

### 3.6.3 *Matters relating to the content of the course*

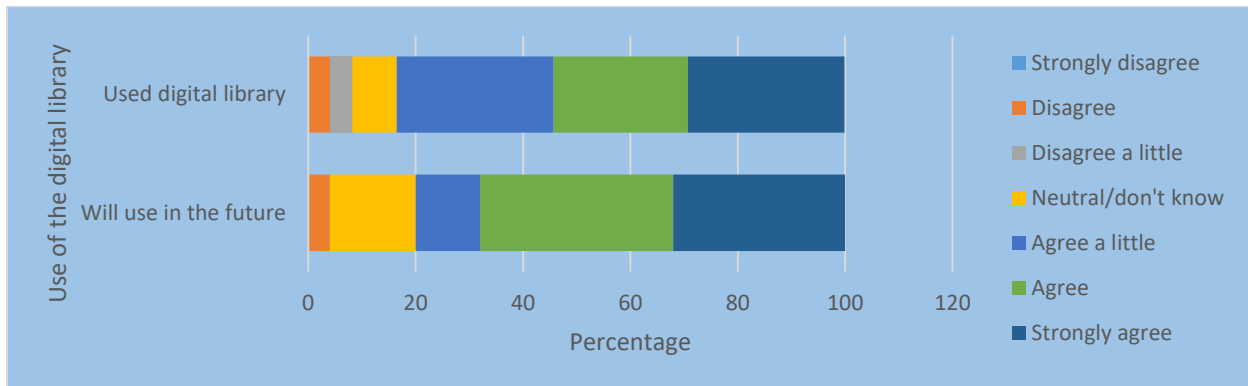
When asked if dietitians should play a role in advocating for the right to food and nutrition in SA, 96% agreed (Table 3.9). One participant expressed the following view:

“I think it's a great starting point, and understanding the human right to food and nutrition aspect is particularly relevant to dietitians. I do feel that dietitians need to play a greater role in advocacy, and not merely from the dietetics board, but within civil society and civil society organisations. There are particular areas where dietitians are the food experts, but as a group, we are often the last to the table - if at all.”

Study participants were asked if the content of the course enhanced their knowledge and understanding of human rights and the right to food and nutrition to which 96% agreed. Ninety percent of participants agreed or strongly agreed that study units were in a logical order (Table 3.10).

### 3.6.3.1 Use of the digital library

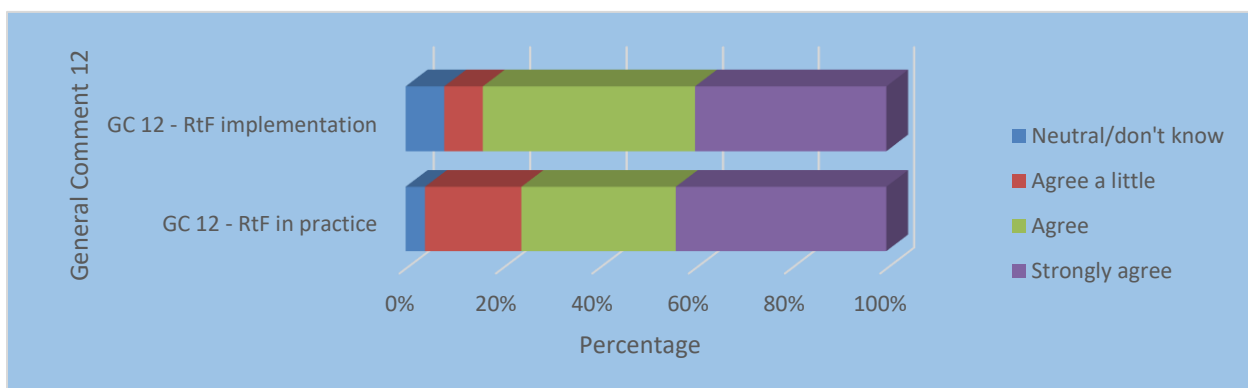
There was varied response from participants when asked if participants made use of the digital library. Of the 80% who agreed, more than a quarter strongly agreed with the statement (Figure 3.11; Table 3.9). However, 8% did not agree and hence did not make use of the digital library at all. Similarly, 80% agreed that they would make use of the resources available on the digital library at a later stage (Figure 3.11; Table 3.9).



**Figure 3.11: Use of the digital library, by participants, (n=24) for additional information**

### 3.6.3.2 Inclusion of an additional study unit on General Comment No. 12

Investigating the need for a study unit designated to GC12, the first statement aimed to assess if the inclusion of GC12 improved participants' understanding of the right to food in practice: 96% agreed, 44% strongly so (Figure 3.12; Table 3.9). In total, 92% of participants agreed that the inclusion of GC12 provided a holistic understanding of the practical implementation of the right to food – 40% strongly agreed (Figure 3.12; Table 3.9).



\* RtF = Right to food

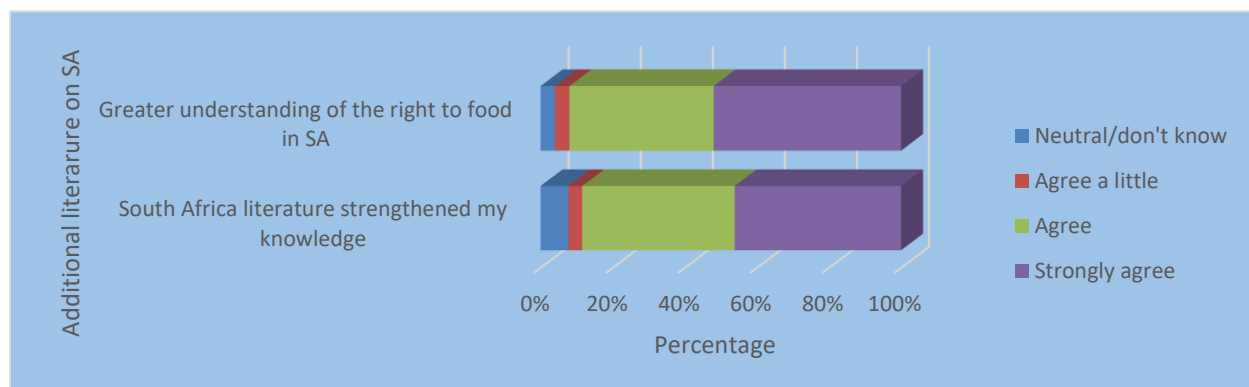
**Figure 3.12: Participants feedback on the practical implementation of General Comment No. 12**

### 3.6.3.3 *The right to food and nutrition in practice - additional literature relevant to South Africa*

Similar to the inclusion of GC12, 92% agreed that the addition of literature on the right to food in South Africa strengthened their knowledge regarding the status of the right to food in South Africa (SA), with almost half (44%) strongly agreeing with the statement (Figure 3.13; Table 3.9). When asked if they had a greater understanding of the right to food and nutrition in SA, 96% agreed to some extent, with more than half (52%) strongly agreeing (Figure 3.13; Table 3.9). Sentiments were echoed by one participant:

“The additional reading on conditions in South Africa gave me a lot of insight into an area that I thought would be providing more human rights access to everybody.”

Additional comments included “Unfortunately the extra reading was only received after having completed the course” and “Quite intense and a lot of material / info to cover.”



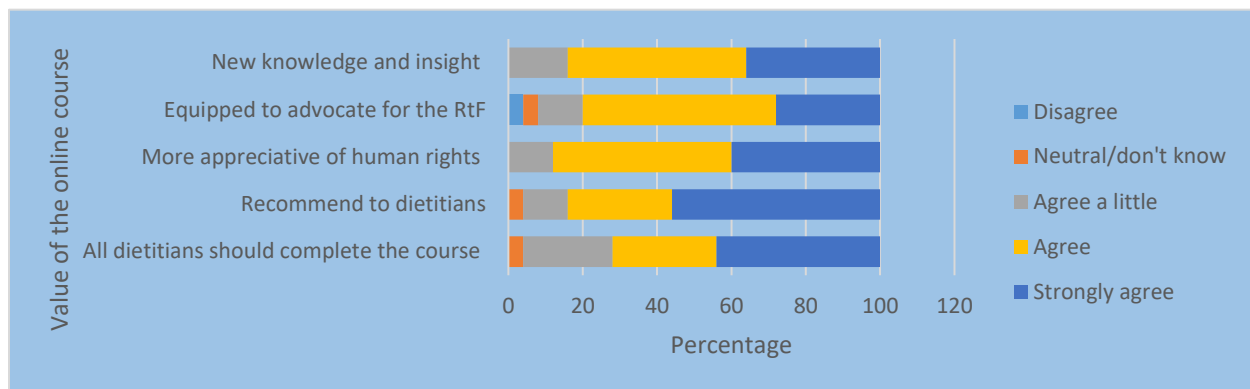
**Figure 3.13: Understanding of the right to food in SA and the addition of SA literature**

### 3.6.4 *Assessment of the course*

All participants agreed that the course provided new knowledge and insight into issues relating to the right to food and nutrition and were more appreciative of the human rights aspects that relate to their specific area of work as “...knowing about the human rights aspect of the right to food is very relevant to dietetic professionals.”

Of the 25 participants, 92% felt they were more equipped to advocate for the right to food and nutrition after completing the course (Figure 3.14; Table 3.9). Nearly all participants (96%) agreed that all dietitians should complete the FAO course on human rights and the right to food and nutrition and would recommend this course to others (Figure 3.14; Table 3.9). One participant emphasized this: “I feel all allied health [professionals] should complete this course, not only dietitians”. However, another participant felt

differently: “Although all dietitians should have knowledge of the right to food, the course was intensive and I feel one has to have an intrinsic desire to be highly knowledgeable in this area to start off with.”



\* RtF = Right to food

**Figure 3.14: Value of the online course (n=25)**

### 3.6.5 Positive aspects of the course

Participants were asked to identify two positive aspects of the course. Three main themes were highlighted (Table 3.10): course design relating to the online nature of the course; course design relating to presentation of course material; and course content relating to knowledge on a new topic.

“I had limited knowledge about human rights and the right to food, the course gave me a broad overview which would definitely assist me in my area of work.”

“The wealth of knowledge gained and the insight into a very interesting and challenging side to food and nutrition as I know it.”

**Table 3.10: Positive aspects of the online course as identified by participants**

Main themes	Relevant quotes
Course design – e-learning, online nature of the course	<p>“I could schedule the course according to my time availability which was good.”</p> <p>“The course was easily accessible at any time when I had free time.”</p>
Course design – presentation of course material	<p>“The pop-up questions were nice helped me learn and remember important points.”</p> <p>“It is presented in a creative way not to become boring.”</p> <p>“Clear slides and information.”</p> <p>“Basics were given but I could also get more information.”</p> <p>“Very easy to navigate and enjoyable to read online.”</p> <p>“The course material was done and presented in a professional and interesting manner.”</p>
Course content – knowledge on a new topic	<p>“The wealth of knowledge gained and the insight into a very interesting and challenging side to food and nutrition as I know it.”</p>
Course content – knowledge on a new topic	<p>“Increasing knowledge on human rights overall, and right to food specifically.”</p> <p>“A new area of research for me that I hadn't read much on before.”</p> <p>“I had limited knowledge about human rights and the right to food, the course gave me a broad over view which would definitely assist me in my area of work.”</p> <p>“The course addressed a topic that was not covered in detail when I completed my degree so it was very beneficial and I learned a lot. Each individual that completes this course will realise how they can contribute towards achieving food security in South Africa.”</p> <p>“An area of nutrition that did not get taught in detail at university.”</p>

### 3.6.6 Negative aspects of the course

Participants were asked to identify two negative aspects of the course. Five main themes were highlighted (Table 3.11): Difficult language, abstract concepts, new terminology and acronyms; the time-consuming nature; presentation of course material; the addition of hard copies and matters relating to the post-test.

“...unfamiliar content/terminology compared to what one uses daily in the practice.”

“I did find the extra reading quite onerous and didn't get through all of it in time.”

“Fairly dry reading which made it difficult to stay engaged with the content”.

“Printed material will be a great addition to the course and assist, especially with the additional topics added for SA context.”

“Some of the course material [is] outdated, and requires updating (but also recognise that course done by FAO).”

“[I] did not expect the post-test to ask so much knowledge.”

One participant commented on the fact that there was a vast difference between what was covered in the course and what was asked in the pre- and post-test.

**Table 3.11: Negative aspects of the course as identified by participants**

Main themes	Relevant quotes
Difficult language, abstract concepts, new terminology and acronyms	<p>“Language/vocabulary/abstract ideas were difficult for me personally.”</p> <p>“Difficult terms and acronyms to remember...”</p> <p>“...unfamiliar content/terminology compared to what one uses daily in the practice.”</p>
Amount of reading, course material was time consuming	<p>“Too much reading material.”</p> <p>“I did find the extra reading quite onerous and didn't get through all of it in time.”</p> <p>“There is a lot of literature to get through and understand.”</p> <p>“The course content was a lot to cover in the specified time period.”</p> <p>“I think the content can get quite heavy, especially if one doesn't really work in an area that makes constant use of the information.”</p> <p>“Probably more time was needed in order to read all the documents than originally anticipated...”</p>
Presentation of material	<p>“Some modules were fairly “dry” reading and I found it difficult to stay engaged with the content.”</p> <p>“Course material was not as clear as it could have been. Website text heavy.”</p> <p>“I feel there is a lot of information relating to legal clauses which is not all necessary for us to know, a less detailed summary I will see as an advantage. This will enable me to just refer back to the summary should I need information at hand.”</p> <p>“Some of the course material outdated, and requires updating (but also recognise that course done by FAO).”</p>
Course presentation – the addition of hard copies or pdf documents	<p>“Printed material will be a great addition to the course and assist, especially with the additional topics added for SA context.”</p> <p>“I would have like[d] to have all the course content in one pdf document instead of switching between different pdf documents to access different lessons.”</p> <p>“Hard copies would be preferable.”</p>
Matters relating to the post-test	<p>“Post-test have to fill it 3 times...still not sure if it was right done...”</p> <p>“Time for post-test was too little.”</p> <p>“Did not expect the post-test to ask so much knowledge.”</p> <p>“...big gap between FAO and post-test.”</p>



In summary participants experienced a positive improvement in knowledge and understanding of human rights and the right to adequate food and nutrition after completing the e-learning course. They are more appreciative of the role they can play in advocating for the rights of others and would recommend other dietitians to complete the course. Participants also provide valuable insights into how the course could be improved upon.

## CHAPTER 4: DISCUSSION

### 4.1 Introduction

South Africa has a rich human rights history and has committed itself in the Constitution to implementing policies and strategies aimed at ensuring “democratic values, social justice and fundamental human rights” to “improve the quality of life of all citizens and free potential of each person”<sup>35</sup> and is thus, by extension, obligated to respect, protect, promote and fulfil the right to food.

A rights-based approach to addressing South Africa’s unequal and unjust food and nutrition security challenges provides policy makers and healthcare professionals charged with implementing programmes and strategies an opportunity to work towards ensuring adequate access to food and nutrition security by incorporating human rights principles into all processes and procedures. One way in which this could be achieved is if healthcare professionals, across the board, are provided with training on the principles of human rights and the right to adequate food and nutrition, within the South Africa context. Accordingly, the HPCSA has recognised the importance of creating competencies in human rights and stipulated in 2007 that human rights principles form part of the generic competencies of the undergraduate curriculum for all healthcare professionals, including dietitians.

For dietitians who graduated prior to the HPCSA’s stipulations regarding training in human rights, no tested or validated training tools are available to train them on the principles of human rights and the right to adequate food and nutrition in South Africa. This study investigated the suitability of a “Right to Food” e-learning course to improve South African dietitians’ knowledge and understanding of “the right to adequate food and nutrition”. The content of the e-learning course provides the knowledge required to implement a rights-based approach to food and nutrition security problems in South Africa and is a valuable capacity-building tool.

### 4.2 Reliability of the questionnaire used to assess an improvement in the knowledge and understanding about the right to adequate food and nutrition

Reliability of the research instruments (Demographics and Human Rights and as well as the pre- and post-test) was acceptable. The researcher was confident the pre- and post-test was able to determine if an improvement in knowledge of participants who completed the e-learning course on human rights and the right to adequate food and nutrition, took place.

What was of interest to the researcher was that the majority of dietitians who completed the questionnaire and hence showed interest in completing the course worked in a clinical setting. As less than 10% of dietitians were employed as community dietitians the appeal of a course, such as this one, clearly stretches beyond the area of work where dietitians currently find themselves – demonstrating the course’s universal appeal and potential use as a training tool. Due to the generic nature of human rights-based approach, the course could be suitable for other healthcare professionals in South Africa as well.

Participants ranged in age from those recently qualified and starting out in their careers, to dietitians who have been working for decades. Because the course was online, dietitians with many years of clinical experience were able to take part to educate themselves about the human rights content, which was not included at the time when they qualified as dietitians. This is encouraging and in contrast to findings from results published in a study reviewing evaluation outcomes of web-based continuing medical education, where years of clinical experience were linked to a reduced likelihood of access to computer-based resources.<sup>61</sup>

#### **4.3 Dietitians’ perceptions regarding the concepts of human rights and the right to adequate food and nutrition**

##### *4.3.1 Perceptions expressed by dietitians at the start of the study*

Study participants agreed that human rights and the right to adequate food and nutrition are important concepts, which all dietitians should have knowledge of. Registration as a health professional with the HPCSA requires adherence to the Professional Code of Conduct and general rules of ethics, human rights and medical law.<sup>58</sup> Yet dietitians, who partook in the study, graduated before human rights was added to the curriculum and have, based on the demographic questionnaire, not completed any postgraduate courses. The e-learning course therefore provides an opportunity for dietitians and other healthcare professionals to improve their knowledge of human rights and the right to adequate food in order to conform to the HPCSA’s code of conduct.

The general concept of adequate food and food security can be broken down into four dimensions – food being adequate, culturally acceptable, meeting nutritional needs, and being safe.<sup>84</sup> These concepts are interrelated and must all be present for people to be food secure, as no single element is able to ensure and sustain food security on its own.<sup>24,84</sup> In light of the alarmingly high levels of food insecurity in South

Africa, applying a rights-based approach to developing and implementing programmes, policies and strategies targeted at the most vulnerable is essential as this provides an internationally acceptable framework.<sup>25</sup> Consequently, the researcher argues that it is important for dietitians and other healthcare professionals and policy makers to understand human rights and the right to adequate food.

The narrow view with which the right to food was understood initially was highlighted by dietitians' response to what the right to food meant to them. Although responses varied, some participants focused on the nutritional content and quality of food. This is understandable as dietitians who partook in the study graduated before human rights and the right to adequate food and nutrition was added to the undergraduate curricula across accredited academic institutions in South Africa.<sup>59</sup> However, in spite of no prior exposure to courses related to the right to adequate food and nutrition, many participants touched on some of the above-mentioned elements. The insight into the broader concepts related to human rights and the right to adequate food thus demonstrated is probable due to the service-rendering nature of the dietetic profession. This confirmed that dietitians are able to see beyond the idea of provision of healthy and nutritious food but also the important role that culture, sustained supply at individual, household and community level play in ensuring adequate access. There was some evidence of misconceptions about the right to food as one dietitian expressed the view that the right to food does not encompass the right to choose food. However, a human rights-based approach entails that culturally acceptable food choices are important in the context of human dignity and dietary adequacy.<sup>14</sup>

#### *4.3.2 Relevance of changing perceptions of dietitians regarding the right to adequate food and nutrition*

After completion of the course, participants felt better equipped to fulfil the role of advocating for the right to adequate food and nutrition in South Africa. Participants recommend that all dietitians should complete the course and would recommend it to others.

These findings clearly demonstrate that the course resulted in an increase in participants' appreciation of human rights and a deeper understanding of their role in advocating for the right to adequate food and nutrition. Similar results were reported by nutrition Masters Students from South Africa, Uganda and Norway who partook in a multi-country nutrition, human rights and governance-learning module.<sup>85</sup> London et al. agrees that as duty-bearers, health professionals can act as advocates to promote and fulfil human rights. Although typically the realisation of human rights is primarily the obligation of the state,

health care professionals have a social responsibility to ensure that they themselves are not responsible for human rights violations.<sup>86</sup>

The concept of dietitians and healthcare professional as advocates for human rights is expanded upon by Libal et al. in their chapter on Human Rights-Based Community Practice in the United States:

“Efforts to realise human rights require grassroots mobilisation and engaged community-level practice...knowledge about human rights does not belong solely to lawyers, policy-makers, or other professional groups; rather, it must be fostered among the citizenry at large, especially those directly affected by key social problems. Community practitioners can serve as important intermediaries.”<sup>87</sup>

Furthermore, many participants in this study sought opportunity to incorporate elements of human rights and knowledge of the right to adequate food, obtained during the course, into their current working environment - demonstrating the integration of theoretical knowledge into practice, a key driver of behaviour change. Not only will dietitians, as a result be able to empower and educate communities and individuals, some participants experienced a change in the manner in which they approach nutrition challenges in their work. For some participants, the course generated “a call to action”, implying a desire to take this newfound knowledge and put it into practice. Similarly, students involved in the NOMA track module, “Nutrition, human rights and governance” shared these views and anticipated the future implementation of an HRBA (human rights based approach) in their daily practice.<sup>85</sup>

Florencio et al. expands on this concept by suggesting that a rights-based approach to food and nutrition provides the opportunity for dietetic professionals to strengthen cross-disciplinary partnerships especially where there is a need to develop competencies across professional fields – “there is a dual need for competence building: nutrition people should receive training on human rights and human rights people should receive training on food and nutrition”.<sup>88</sup>

Vogliano, Steiber and Brown in the Journal of the Academy of Nutrition and Dietetics argue the need for further collaboration between food producers and nutrition professionals as we face the need to feed an ever-growing population.<sup>89</sup> Inter-professional collaboration is an important element of a rights based approach.

This in the context of over- and under-nutrition coexisting in many countries around the world.<sup>89</sup> In response to this challenge the Academy of Nutrition and Dietetics hosted a conference in December 2014 to find consensus among nutrition leaders on this matter. One of the outcomes of the conference was a commitment by the Academy to “develop integrated training and education resources to enhance proficiency” of registered dietitians and other healthcare professionals.<sup>89</sup>

#### **4.4 Influence of the e-learning tool on dietitians’ knowledge and understanding of the right to adequate food and nutrition concepts**

Participant’s anticipated the course would improve their knowledge on human rights and the right to food not only from a content perspective but also from an improved understanding of their role as dietitians, the laws, regulations and legal framework supporting human rights as well awareness of existing programmes, policies and strategies. According to Florencio et al. a human rights-based approach to adequate food infers a re-examination and ultimately an adjustment in the way we think about hunger and malnutrition.<sup>88</sup> Similarly, the manner in which policies are shaped, monitoring and evaluating programmes planned, and research and education regarding food and nutrition, needs to demonstrate this shift.<sup>89</sup>

Study participants lacked knowledge of human rights and the right to adequate food and nutrition at the outset of the study and at the same time perceived it important for themselves and their peers to acquire such knowledge and understanding – an important internal motivational factor to sign up for the course. Results from the pre-test were significantly lower than those of the post-test, indicating limited knowledge of human rights and the right to adequate food and nutrition at the outset of the course. This was expected as participants had not had any undergraduate or postgraduate training on human rights.

Due to the significant increase in knowledge from the pre- to the post-test the null hypothesis that the FAO e-learning course does not improve the knowledge and understanding of dietitians in South Africa regarding human rights and the right to adequate food and nutrition, was rejected. It serves as evidence of a positive improvement in knowledge and understanding for participants who completed the online course. This was confirmed by participants who agreed the course enhanced their knowledge and understanding of human rights and the right to adequate food and nutrition. In spite of the statistically significant increase in knowledge only a fifth of participants achieved the minimum requirement for the post-test to receive CEUs for completion of the course.

Participants highlighted specific knowledge deemed significant: the role of government, a rights-based approach, the concepts of hunger, food security and the right to food, human rights principles and that the right to food is more than the provision of food. This speaks not only to UNICEF's Conceptual Framework, which provides the link between health, nutrition and socio-economic factors,<sup>54</sup> but also strengthens the role dietitians and other healthcare professionals could play implementing the Voluntary Guidelines on the Progressive Realisation of the right to adequate food and the Roadmap for Nutrition in South Africa.

As suggested by the developers of the FAO e-learning course, South Africa specific literature was added and provided participants the opportunity to contextualise human rights developments and progress in South Africa, another significant point of new knowledge. Due to the electronic medium, it enables future versions to be up to date with the most recent sources relevant to this topic. It is also suitable to this population as they explicitly stated that they preferred electronic learning.

The resources made available to participants through the provision of a digital library contributed to the success of the programme. Participants not only valued the resource but also made use of it and stated they would make use of it in the future. Bourn et al. agree that students partaking in online courses value access to relevant literature provided by higher education institutions.<sup>71</sup> The digital library is therefore an essential element of the course and should be expanded and updated continuously.

## **4.5 Recommendations and possible areas of improvement**

### *4.5.1 Introduction*

Participants valued the fact that they could complete the course in their own time. In "E-learning methodologies: A guide for designing and developing e-learning courses", Ghirardini has identified guidelines for best practice relating to e-learning.<sup>69</sup> These guidelines include amongst others allowing learners the ability to download online content, work offline and work on their own in combination with asynchronous collaboration facilities, such as discussion forums and e-mail interchanges.<sup>69</sup>

#### *4.5.2 Feedback to the Food and Agriculture Organisation*

Based on research findings, feedback received from participants and best practice regarding e-learning, the researcher provides the following feedback to FAO:

1. Make PDFs available to participants: Although, the researcher would not recommend printing documents on participants' behalf, making PDFs or downloadable content available would encourage offline learning, allow participants to refer back to important resources at a later stage and share content with others.
2. Review course content: While the course was developed in 2007, much advancement has been made in the last 10 years regarding the right to adequate food and nutrition. The researcher therefore recommends the course content be reviewed by an expert panel and new content added if deemed appropriate. For example, over 90% of participants agreed that the addition of GC12 enhanced their understanding of the right to adequate food in practice, as well as successfully providing guidance on the practical implementation thereof. It is therefore recommended that this document either be added to the digital library or be included in any updates, which FAO might make to the e-learning course in future.
3. Review the FAO e-learning tool using the FAO development "E-learning methodologies: A guide for designing and developing e-learning courses"<sup>69</sup> as a guide. The purpose of this document is to provide detailed guidance on designing and developing an e-learning course and discusses basic concepts and information on the processes and resources involved in e-learning development. A specific issue raised by participants that the course did not easily allow participants who were in the process of completing the course to keep track of their progress or for those who have already completed the course to access information afterwards.
4. Research instruments designed and tested for this study could be adapted and used by the FAO, as well as training institutions interested in offering the course to dietitians and healthcare professionals.



5. Prioritise reading list: The digital library is a valuable resource but the amount of reading and literature is overwhelming. The researcher therefore suggests an expert panel review the reading list and prioritise literature into categories, such as “must know” and “nice to know”.
6. Develop a healthcare professional version: Streamline and simplify the amount of content focused on the legal framework and develop a practical version of the course for healthcare professionals. This could be achieved by including a comprehensive glossary of terminology explaining it in a way that healthcare professionals could grasp the meaning easily.

#### **4.6 General recommendations to the Professional Board of Dietetics and Nutrition of the HPCSA**

In 2017 the HPCSA approved the concept of training a nutrition professional cadre at entry level. Starting from the needs of the population, i.e. primary health care perspective, this new professional allows for advanced qualification(s) and accompanied registration to address the tertiary-level needs of the population.<sup>90</sup> The following definition of a “dietitian-nutritionist” was published by the International Confederation of Dietetic Associations in 2014: “a professional who applies the science of food and nutrition to promote health, prevent and treat disease to optimise the health of individuals, groups, communities and populations”.<sup>90</sup>

There has been a shift in thinking about the role of dietitians, culminating in the 2017 “Scope of practice” of entry level dietitian-nutritionists, developed by the HPCSA.<sup>90</sup> Two specific examples which speak to human rights and the right to adequate food principles are included:

- Influencing the national food systems/environments to enable all individuals to have access to affordable, nutritious and safe food.<sup>90</sup>
- Applying critical and creative thinking in working effectively within a multidisciplinary team and multi-sectoral environment, the community and stakeholders in contributing to the personal, social and economic development of society in an ethical and professional manner.<sup>90</sup>

Hence, the work of newly qualified dietitians will need to be strongly grounded in human rights and right to adequate food and nutrition. Dietitians who have already qualified should be given opportunities to acquire the same skills through CPD accredited activities.

In a study aimed at determining if South African dietitians require standardised ethics update courses to comply with CPD requirements for ethics points, 84.8% of respondents agreed that ethics, human rights and medical law update courses be made available for all dietitians.<sup>91</sup> Until 2017 the HPCSA stipulated the mandatory accrual of a minimum of five Continuing Education Units (CEU's) on human rights, ethics and medical law per year. According to Craucamp et al., 78% of dietitians involved in that study felt existing CPD activities did not provide sufficient opportunities to gain adequate CPD points for ethics.<sup>91</sup> Furthermore, a study conducted in 2008 to explore dietitians perceptions of the continuing professional development system in South Africa found dietitians have difficulty in obtaining the mandatory 5 ethics CEU's.<sup>91</sup> In order to meet the demand for CEUs on human rights, ethics and medical law, CPD accredited courses on human rights and the right to food must be developed, adapted or made available to all dietitians and other healthcare professionals. The FAO developed e-learning course provides just such an opportunity.

Based on the findings of this research and even though the sample size was small, the researcher suggests the Board of Dietetics and Nutrition of the HPCSA considers the following recommendations:

1. Review the FAO e-learning tool for CEU accreditation purposes.
2. Work with academics already training undergraduate dietitians in human rights and the right to adequate food to develop a study unit on human rights and the right to adequate food and nutrition in South Africa. Supplementary articles specific to the right to food and nutrition in South Africa were an important addition, which strengthened participants' knowledge regarding the status of the right to adequate food and nutrition in SA and provided greater understanding.
3. Encourage dietitians and other healthcare professionals to complete the course.
4. Review the suitability of the pre- and post-tests designed and tested for this study in order to award CEUs.
5. Strengthen the linkages between human rights to ethics and professional code of conduct in the practice of dietetics.

#### 4.7 LIMITATIONS

1. Due to the small sample size and high attrition rate, the statistical significance of these results may come into question and findings should be interpreted with caution. Although the total amount of time required to complete the course was estimated to be between 60 and 90 minutes per unit, the duration of the course (8 weeks) may have been perceived to be too time consuming and hence contributed to the low response rate. To overcome this limitation in future, the researcher suggests the total amount of weeks allocated to complete the study be reduced or managed differently, for instance to set a maximum time period but not limiting the minimum time.
2. While this might appear to contradict the findings, that show significant improvement in knowledge from the pre- to the post-test and achievement of CEUs, only five participants achieved a minimum score of 70% for the post-test (a HPCSA requirement).
3. A further limitation to the study was the use of foreign terminology from the legal community, which hampered the progress of some participants. This limitation would be difficult to minimise unless the course itself was adapted to suit dietitians and healthcare professionals.
4. As the course was internet based it may have inadvertently excluded participants unable to access a stable internet connection, especially those living and working in rural areas.
5. Measuring understanding using an online tool which only includes one open-ended question is a limitation of the study. It can be argued that only qualitative methods such as interviews and focus group discussions can determine true understanding. Also, measuring knowledge with the same online tool has the potential disadvantage that participants can access resources and therefore skew the accuracy of results.
6. When reporting perceptions of the study population, participants may have reported, what they thought the research team wanted to hear rather than their real perceptions (Hawthorne effect).
7. Due to the small sample size, it is recommended a follow up study be conducted with a more representative sample.

**Personal development gained by the researcher**

On a personal note, completing this thesis has been a long and difficult journey, which would not have been possible without the ongoing support of my family and friends. I have been lucky enough to work with incredibly knowledgeable and dedicated co-investigators who continued to believe in me and encourage me to continue – thank you Maritha and Liesbet! Not only did this Master’s programme provide me with the opportunity to broaden my human rights and right to food knowledge but also the chance to travel to Norway and Uganda and meet likeminded passionate dietitians and nutritionists. This “cultural exchange”, of sorts, afforded to me was a once-in-a lifetime experience which in some ways shifted my career focus but also ignited in me a passion to advocate for equality and social justice for all South Africans, but especially women and young children.

## CHAPTER 5: Conclusion

Solving food insecurity, hunger and malnutrition challenges in South Africa requires focused and dedicated policy makers, healthcare professionals and government leaders to work together to realise the right to adequate food and nutrition for all South Africans from a human rights-based perspective.

One of the current challenges is that qualified dietitians lack formal education regarding human rights and an in-depth understanding of the right to adequate food and nutrition. At the same time, there exists a need for dietitians to add human rights-based approaches to their knowledge and competencies in the field of nutrition. By testing and statistically proving that the FAO e-learning tool “A primer to the right to adequate food” improved the knowledge and understanding of dietitians in South Africa regarding the right to food, this study has demonstrated its suitability and value.

The e-learning course is an important capacity-building resource and provides an opportunity for dietitians and other healthcare professionals to advocate for and strengthen a human rights-based approach to food and nutrition security programmes, policies and strategies in South Africa.

If the HPCSA is to take seriously its commitment to creating competencies in human rights, CPD accreditation of this e-learning course, while taking into account recommendations made by the researcher, would be an important step in providing incentive and opportunity for dietitians in South Africa to improve their knowledge and understanding of human rights and the right to adequate food.

While the study was conducted on a small scale and focused only on dietitians in South Africa, the FAO e-learning tool, together with feedback to the FAO including country specific content can be applied to healthcare professionals working in developing countries worldwide. Human rights and the right to adequate food and nutrition is not a concern of only the South African government but is of international concern to all who value human dignity. If dietitians are going to be effective in addressing food and nutrition insecurity challenges in South Africa, which are often rooted in poverty and injustice, they have to be equipped to promote human rights.

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[http://www.hpcs.co.za/Uploads/editor/UserFiles/downloads/dietetics/Competencies\\_with\\_assessment\\_criteria\\_March%202017\\_Final.pdf](http://www.hpcs.co.za/Uploads/editor/UserFiles/downloads/dietetics/Competencies_with_assessment_criteria_March%202017_Final.pdf).
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## **ADDENDUM A: ADVERTISEMENT**

**Are you interested in completing an online, CPD accredited course on “The Right to Food”?**

**Are you a dietitian registered with the HPCSA?**

**Are you interested in nutrition and human rights?**

In the Universal Declaration of Human Rights, each and every human being has the right to adequate food. As dietitians', we know and understand the role, food plays in the health and nutrition of people. A rights-based approach could provide a unique way in which we address underlying causes of malnutrition in South Africa.

My name is Nicola Eley, a Masters of Nutrition student at Stellenbosch University. My research aims to determine if an online distance-learning tool can improve the knowledge and understanding of South African dietitians regarding the right to food.

There are two parts to this research:

1. *A demographic and human rights questionnaire* - to gather demographic information about registered dietitians in South Africa and your current knowledge and understanding of human rights and the right to food. All information you provide will remain anonymous and confidential and you are under no obligation to participate in the rest of study. Completing the questionnaire should not take longer than 5 minutes.
2. *A “Right to Food” e-learning tool* - an 8-week, online, CPD accredited course. At present, there are no tested or validated training tools available to train dietitians on the principles of human rights and the right to food in South Africa.

By partaking in this research, you will be making a valuable contribution towards the development of training tools for dietitians in South Africa. More information will be emailed to you.

## **ADDENDUM B – DEMOGRAPHIC AND HUMAN RIGHTS QUESTIONNAIRE**

CAN A FOOD AND AGRICULTURE ORGANISATION E-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

Date:

Participation code:

### **Introduction:**

In the Universal Declaration of Human Rights, each and every human being has the right to adequate food. As dietitians' we know and understand the essential role that food plays in the health and nutrition of people. A rights-based approach could provide a unique way in which we could address the underlying causes of malnutrition in South Africa.

The researcher is currently enrolled as a Masters of Nutrition student at Stellenbosch University and the research focuses on nutrition and human rights. To improve dietitians' knowledge of the right to adequate food, the researchers aim to test whether a distance-learning tool could be used for this purpose.

Even if you do not have the time now to complete the e-learning tool, you can make a valuable contribution to the research by completing this screening questionnaire, which should not take longer than 5 minutes. It will be greatly appreciated if you would answer the questions below to the best of your ability.

The purpose of these questions is to gather demographic information about registered dietitians in South Africa and gather some provisional information on dietitian's perceptions, knowledge and understanding of human rights and the right to food. All information you provide will remain anonymous and confidential. You are under no obligation to participate in the rest of study.

## Demographic and educational information

1. Age: ..... years

2. Gender: Tick the box that applies

a) Male

b) Female


3. Current occupation: Tick the box that applies

a) Community dietitian

b) Clinical dietitian

c) Food Service dietitian

d) Other: Specify


.....

.....

.....

4. Please provide details of the specific area in which you work:

.....

.....

.....

5. Tertiary qualifications: Please provide detail of all qualifications

Degree	Tertiary Institution	Year/s of graduation

6. Were human rights and/or the right to adequate food incorporated into your undergraduate studies? Tick the box that applies

a) Yes

b) No


If no, continue with Q7. If yes, please provide detail in the table below.

c)

Year of studies when human rights was offered	Number of lectures per year
1 <sup>st</sup>	
2 <sup>nd</sup>	
3 <sup>rd</sup>	
4 <sup>th</sup>	

Briefly describe the content of the course or module/s:

.....

.....

.....

7. Did you partake in the pilot study?

a) Yes

b) No


**Perceptions and understanding of human rights and the right to adequate food**

8. Since you graduated, have you completed any courses on human rights and the right to adequate food?

a) Yes

b) No


If yes, please provide detail in the table below.

c)	Course details		
	1	2	3
Year attended			
Title			
Institution that offered the course			
Duration of the course			

Briefly describe the content of the course(s):

.....

.....

.....

9. Do you consider it is important that dietitians have knowledge and understanding of human rights principles?

Please respond to the above statement by ticking the box that you agree with.

- a) Strongly agree
- b) Agree
- c) Disagree
- d) Strongly disagree


10. In your own words and without researching the answer, what does the right to adequate food mean to you?

.....

.....

.....

11. Are you interested in taking part in a human rights and right to adequate food distance learning course?

You will be given 8 weeks to complete the course, which should take 8 to 10 hours in total. 9 CEUs will be awarded (on level 2 and all ethical points).

- a) Yes
- b) No


If yes, please provide your email address and additional information about the course will be forwarded to you.

.....



Thank you for taking the time to complete this questionnaire. Please return the completed form by  
*(insert date)*.

Kind regards,

Nicola Eley

## **ADDENDUM C: PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM**

CAN A FOOD AND AGRICULTURE ORGANISATION E-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

**REFERENCE NUMBER: S17/01/020**

**PRINCIPAL INVESTIGATOR: Nicola Eley**

**ADDRESS: 44 Liberte, Oude Libertas, Stellenbosch, 7600**

**EMAIL: nmeley@gmail.com**

**CONTACT NUMBER: 0825772372**

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the study staff or doctor any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee at Stellenbosch University** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

### **What is this research study all about?**

- *This study aims to determine if an e-learning course can improve dietitians' knowledge and understanding of human rights and the right to food as well as to describe the perceptions of dietitians regarding human rights and the right to adequate food at the start of the study.*

- *The study will be conducted electronically and all registered dietitians who are members of Association of Dietitians of South Africa (ADSA) and who are on the electronic mail distribution list have been invited to participate. The expected sample size is 70 participants.*

**Why have you been invited to participate?**

- *As a registered dietitian, you completed the questionnaire that was distributed via e-mail to ADSA members, which aimed to gather demographic information and perceptions of human rights and the right to adequate food. In your response, you expressed a desire to complete the online course.*

**What will your responsibilities be?**

- *The study will be conducted in the form of an online, distance learning, CPD accredited course, which will run for 8 weeks. The course will be conducted via the Food and Agriculture Organisation's website ([www.fao.org](http://www.fao.org)). There are 8 study units in total which can be completed in your own time and at your own pace over a period of two months.*
- *You will be responsible for your own learning experience as this is a self-study course. You will be expected to complete the pre/post - tests as well as ensure that you work through all the lessons within the stipulated time frame. You are also expected to complete a course evaluation form, which will be used to make improvements to the course in the future.*
- *Each unit takes approximately 45 minutes to complete.*

**Will you benefit from taking part in this research?**

- *As a benefit from completing the study and all the necessary tests and evaluation forms, you will receive 16 CPD points (Level 2: Ethics).*
- *You will have the opportunity to learn about human rights and the right to food. Using a human rights-based approach in everything you do, could be of great value to you and the clients you serve.*

**Are there risks involved in your taking part in this research?**

- *There is no risk involved in taking part in this research.*

**If you do not agree to take part, what alternatives do you have?**

- *You are not obliged to participate, thus alternatives are not necessary.*

**Will you be paid to take part in this study and are there any costs involved?**

- *No, you will not be paid to take part in the study.*
- *There will be no costs involved for you, apart from internet expenses.*

**Is there anything else that you should know or do?**

- *You can contact the Health Research Ethics Committee at 021-938 9207 if you have any concerns or complaints that have not been adequately addressed by the researcher.*
- *You will receive a copy of this information and consent form, signed by the researcher for your own records.*
- *All information provided during the course of the research will remain confidential.*

**Declaration by participant**

By signing below, I ..... agree to take part in a research study entitled “An investigation to determine whether the distance learning tool developed by the FAO can improve the knowledge and understanding of dietitians in South Africa regarding the right to food”.

I declare that:

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.

- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) ..... on (*date*) ..... 2017.

.....

**Signature of participant**

.....

**Signature of witness**

**PLEASE SCAN AND EMAIL TO [nmeley@gmail.com](mailto:nmeley@gmail.com)**

**Declaration by investigator**

I (*name*) ..... declare that:

- I explained the information in this document to .....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above

Signed at (*place*) ..... on (*date*) ..... 2017.

.....

**Signature of investigator**

.....

**Signature of witness**

## **ADDENDUM D: PRE-TEST**

CAN A FOOD AND AGRICULTURE ORGANISATION E-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

Date:

Participation code:

### **Instructions:**

This questionnaire is part of a research project that involves providing training to dietitians in human rights and the right to adequate food. All information will be kept confidential. Please indicate your intent to participate in this research project by completing and signing the attached informed consent form and by completing this questionnaire.

The purpose of the pre-test is to gather baseline data that will be used to determine if the course improves your knowledge of human rights and right to adequate food. Please do not research the questions, but rather answer them to the best of your ability. By signing informed consent, you agree to not research questions as you answer them.

**Section 1**

1. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

The pillars of food security include:

- a) That people are able to feed themselves by having access to productive land on which to grow their own food or obtain it from markets and stores
- b) That food satisfies dietary needs throughout the life cycle and contains a mix of nutrients to allow for normal physical and mental growth, development and maintenance of the body
- c) That government provides physical and economic access to food
- d) That the food supply is stable throughout the year


2. Food security programmes are cross cutting and should involve many stakeholders, name 3 main role players in the table below.

	Role players
1	
2	
3	

3. Match the attribute in column A to the corresponding explanation in column B. Indicate the corresponding number in the space provided.

Human rights can be defined as:

Column A: Attributes of human rights	Column B: Explanation
a) Universal	1. All human rights are on the same level - no one right is more important than another.
b) Indivisible	2. All human rights are applicable everywhere and to everyone.
c) Interdependent	3. All human rights need to be considered when one is being realised.
d) Interrelated	4. The realisation of one human right is dependent on the realisation of others.

a)	
b)	
c)	
d)	

4. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

A human rights-based approach to development:

- a) entails economic growth and increasing people's choices and opportunities
- b) puts individuals' growth first
- c) can be defined as increased national wealth and production




- d) includes economic, social, cultural and political processes aimed at the improvement of the well-being of all individuals

5. Under the terms of Articles 2 and 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), there are 4 general State obligations with regards to the right to food.

Name all 4 in the table provided.

	State obligations
1	
2	
3	
4	

6. Complete the sentence. The aim of the United Nations document titled “General Comment 12: The Right to Adequate Food” is to...

7. Complete the sentence. The FAO’s 2004 Voluntary Guideline to Support the Progressive Realisation of the Right to Adequate Food in the context of National Food Security are...

8. Complete the sentence. The 3 levels of state obligations are “respect, protect and fulfil”.

Provide an explanation for each in the table provided.

	Explanation
Respect	
Protect	
Fulfil	

9. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

The realisation of the right to adequate food is dependent on the realisation of the following rights or freedoms.

a) Information

b) Speech

c) Work

d) Religion

e) Housing

f) Land

g) Education


h) Health care

--

10. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

In international human rights law, individuals are guaranteed the right:

a) to feed themselves

b) to feed themselves and their families

c) to be fed in dignity when they are unable to feed themselves

d) to be fed by government


11. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

A human rights-based approach to development is essential to realising the right to food because:

a) it furthers the realisation of all human rights

b) it aims to promote and protect human rights

c) it gives people the possibility to make legally binding claims that specific duty bearers must provide

d) it demands the use of disaggregated data, in order to ensure non-discrimination and attention on respecting and protecting the human


rights of the most vulnerable

--

12. Name two government programmes that directly or indirectly assist in meeting the South African government's obligation towards the right to food in the box provided.

1	
2	

13. There are 3 articles in the South African constitution which relate specifically to the right to food. To which 3 groups of people does each refer? Answer in the box provided.

--

14. Name 3 organisations/institutions in South Africa that directly or indirectly protect the right to food.

1	
2	
3	

15. What conditions must be met for food to be adequate? List 4 in the space provided and briefly describe each condition.

	Condition	Description
1		
2		
3		
4		

## Section 2

True/False questions:

Please read the statement carefully and state whether it is true or false by ticking the corresponding block.

	True	False
18. The primary aim of the South African Human Rights Commission (SAHRC) is to monitor government's compliance towards human rights.		
19. The realisation of socio-economic rights is not essential in achieving civil and political rights.		
20. All human rights are fundamental rights and freedoms essential for human survival, liberty and dignity.		
21. Children's right to food can be progressively realised.		
22. A human rights-based approach to development focuses on the outcome of the development process.		
23. All members of society have responsibilities towards realising the right to food, only states have legal obligations.		
24. The right to food is categorised as a civil right.		
25. The right to food is only related to agricultural production and the rights of farmers to produce food.		
26. Rights-holders are only those individuals or groups who have knowledge of their rights and who are able to demand services and goods from the government.		
27. A rights-based approach to policy development and implementation is important to government officials only.		
28. The 3 levels of state obligations as outlined in the International Covenant on Economic, Social and Cultural Rights are 'respect, provide and fulfil'.		
29. "Justiciability" means that an individual is able to complain before a court or other independent authority about an alleged violation of his or her rights.		
30. Creating a legal framework for the protection of the right to food is the only way the state can be held accountable by individuals.		

31. South Africa is nutritionally secure on a national level therefore supplementation programmes are unnecessary.		
32. The acronym PANTHER stands for - Participation, Action, Nutrition, Transparency, Human rights, Economic growth and Rule of law.		
33. The Integrated Nutrition Programme (INP) and the National School Nutrition Programme (NSNP) aim to ensure the rights of children to access to food.		
34. In an urban-setting, it is easier to achieve nutritional adequacy than in rural areas due to easier access to various food retail outlets.		
35. The grant system in South Africa addresses poverty and food insecurity and hence can be regarded as a human rights instrument.		
36. The right to be free from hunger is defined in General Comment 12 as being a minimum core standard.		
37. South Africa ratified the International Covenant on Economics Social and Cultural Rights on 10 December 1998.		

### Section 3

Please answer the question by writing a paragraph

38. What expectations do you have for this distance-learning course?



## **ADDENDUM E: POST-TEST**

CAN A FOOD AND AGRICULTURE ORGANISATION E-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

Date:

Participation code:

### **Instructions:**

This questionnaire is part of a research project that involves providing training to dietitians in human rights and the right to adequate food. All information will be kept confidential. Please indicate your intent to participate in this research project by completing and signing the attached informed consent form and by completing this questionnaire.

The purpose of the pre-test is to gather baseline data that will be used to determine if the course improves your knowledge of human rights and right to adequate food. Please do not research the questions, but rather answer them to the best of your ability. By signing informed consent, you agree to not research questions as you answer them.

## Section 1

1. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

The pillars of food security include:

- a) That people are able to feed themselves by having access to productive land on which to grow their own food or obtain it from markets and stores
- b) That food satisfies dietary needs throughout the life cycle and contains a mix of nutrients to allow for normal physical and mental growth, development and maintenance of the body
- c) That government provides physical and economic access to food
- d) That the food supply is stable throughout the year


2. Food security programmes are cross cutting and should involve many stakeholders, name 3 main role players in the table below.

	Role players
1	
2	
3	

3. Match the attribute in column A to the corresponding explanation in column B. Indicate the corresponding number in the space provided.

Human rights can be defined as:

Column A: Attributes of human rights	Column B: Explanation
a) Universal	1. All human rights are on the same level - no one right is more important than another.
b) Indivisible	2. All human rights are applicable everywhere and to everyone.
c) Interdependent	3. All human rights need to be considered when one is being realised.
d) Interrelated	4. The realisation of one human right is dependent on the realisation of others.

a)	
b)	
c)	
d)	

4. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

A human rights-based approach to development:

- a) entails economic growth and increasing people's choices and opportunities
- b) puts individuals' growth first
- c) can be defined as increased national wealth and production


- d) includes economic, social, cultural and political processes aimed at the improvement of the well-being of all individuals

5. Under the terms of Articles 2 and 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), there are 4 general State obligations with regards to the right to food.

Name all 4 in the table provided.

	State obligations
1	
2	
3	
4	

6. Complete the sentence. The aim of the United Nations document titled “General Comment 12: The Right to Adequate Food” is to...

7. Complete the sentence. The FAO’s 2004 Voluntary Guideline to Support the Progressive Realisation of the Right to Adequate Food in the context of National Food Security are...

8. Complete the sentence. The 3 levels of state obligations are “respect, protect and fulfil”.

Provide an explanation for each in the table provided.

	Explanation
Respect	
Protect	
Fulfil	

9. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

The realisation of the right to adequate food is dependent on the realisation of the following rights or freedoms.

a) Information

b) Speech

c) Work

d) Religion

e) Housing

f) Land

g) Education


h) Health care

--

10. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

In international human rights law, individuals are guaranteed the right:

a) to feed themselves

b) to feed themselves and their families

c) to be fed in dignity when they are unable to feed themselves

d) to be fed by government


11. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

A human rights-based approach to development is essential to realising the right to food because:

a) it furthers the realisation of all human rights

b) it aims to promote and protect human rights

c) it gives people the possibility to make legally binding claims that specific duty bearers must provide

d) it demands the use of disaggregated data, in order to ensure non-discrimination and attention on respecting and protecting the human rights of the most vulnerable


12. Name two government programmes that directly or indirectly assist in meeting the South African government's obligation towards the right to food in the box provided.

1	
2	

13. There are 3 articles in the South African constitution which relate specifically to the right to food. To which 3 groups of people does each refer? Answer in the box provided.

--

14. Name 3 organisations/institutions in South Africa that directly or indirectly protect the right to food.

1	
2	
3	

15. What conditions must be met for food to be adequate? List 4 in the space provided and briefly describe each condition.

	Condition	Description
1		
2		
3		
4		



**Section 2**

True/False questions:

Please read the statement carefully and state whether it is true or false by ticking the corresponding block.

	True	False
18. The primary aim of the South African Human Rights Commission (SAHRC) is to monitor government's compliance towards human rights.		
19. The realisation of socio-economic rights is not essential in achieving civil and political rights.		
20. All human rights are fundamental rights and freedoms essential for human survival, liberty and dignity.		
21. Children's right to food can be progressively realised.		
22. A human rights-based approach to development focuses on the outcome of the development process.		
23. All members of society have responsibilities towards realising the right to food, only states have legal obligations.		
24. The right to food is categorised as a civil right.		
25. The right to food is only related to agricultural production and the rights of farmers to produce food.		
26. Rights-holders are only those individuals or groups who have knowledge of their rights and who are able to demand services and goods from the government.		
27. A rights-based approach to policy development and implementation is important to government officials only.		
28. The 3 levels of state obligations as outlined in the International Covenant on Economic, Social and Cultural Rights are 'respect, provide and fulfil'.		
29. "Justiciability" means that an individual is able to complain before a court or other independent authority about an alleged violation of his or her rights.		
30. Creating a legal framework for the protection of the right to food is the only way the state can be held accountable by individuals.		

31. South Africa is nutritionally secure on a national level therefore supplementation programmes are unnecessary.		
32. The acronym PANTHER stands for - Participation, Action, Nutrition, Transparency, Human rights, Economic growth and Rule of law.		
33. The Integrated Nutrition Programme (INP) and the National School Nutrition Programme (NSNP) aim to ensure the rights of children to access to food.		
34. In an urban-setting, it is easier to achieve nutritional adequacy than in rural areas due to easier access to various food retail outlets.		
35. The grant system in South Africa addresses poverty and food insecurity and hence can be regarded as a human rights instrument.		
36. The right to be free from hunger is defined in General Comment 12 as being a minimum core standard.		
37. South Africa ratified the International Covenant on Economics Social and Cultural Rights on 10 December 1998.		

### Section 3

Please answer the question by writing a paragraph

38. How did you experience this distance-learning course?

39. What was the most significant thing you learnt whilst completing the course?

40. What, if anything, will you incorporate into your work after completing the course?

## **ADDENDUM F: COURSE EVALUATION**

CAN A FOOD AND AGRICULTURE ORGANISATION E-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS  
IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

Date:

Participation Code:

### **Instructions:**

Please read carefully the statements below regarding various aspects of the course. Tick the boxes along the range of options, which graded answer, positive or negative, you most agree with except where otherwise instructed.

This evaluation focuses particularly on improving the course by giving your honest assessment regarding:

1. Matters relating to the planning of the course
2. Matters relating to the working methods and conduct of the course
3. Matters relating to the content of the course
4. General assessment of the course

Thank you for taking the time to complete the course evaluation.

Kind regards,  
Nicola Eley

<b>1. Matters relating to the planning of the course</b>	Strongly disagree	Disagree	Disagree a little	Neutral/ don't know	Agree a little	Agree	Strongly agree
1.1 I received satisfactory information about the course prior to its commencement.							
1.2 The course plan, programme and objectives were adequately explained at the beginning of the course.							
1.3 It was clear that I could work at my own pace but needed to complete the material within a given time frame.							
1.4 The time allowed to complete the course was adequate.							
1.5 Comments							

<b>2. Matters relating to working methods and conduct of the course</b>	Strongly disagree	Disagree	Disagree a little	Neutral/ don't know	Agree a little	Agree	Strongly agree
2.1 I found it easy to create a user profile on the Food and Agriculture Organisation's website.							
2.2 The online course material was simple to navigate.							
2.3 The online study material was simple to follow and aided in the learning experience.							
2.4 The learning objectives helped me to keep track of what I was expected to learn.							
2.5 I found the distance learning aspect easy to adjust to and I prefer it to traditional lectures.							
2.6 I enjoyed completing the course online.							
2.7 Because the course could be completed online, I found it easy to fit into my schedule.							

	Strongly disagree	Disagree	Disagree a little	Neutral/ don't know	Agree a little	Agree	Strongly agree
2.8 I would have preferred receiving hard copies of the study material.							
2.9 Comments							
<b>3. Matters relating to the content of the course</b>	Strongly disagree	Disagree	Disagree a little	Neutral/ don't know	Agree a little	Agree	Strongly agree
3.1 The content of the course enhanced my human rights and right to food knowledge and understanding.							
3.2 The study units followed a logical order.							
3.3 I used the digital library to find additional information.							
3.4 I shall use the digital library in future.							



	Strongly disagree	Disagree	Disagree a little	Neutral/ don't know	Agree a little	Agree	Strongly agree
3.5 The inclusion of General Comment 12 (study unit 8) enhanced my understanding of the right food in practice.							
3.6 The inclusion of General Comment 12 gave me a holistic understanding of the practical implementation of the right to food.							
3.7 The additional literature on the right to food in South Africa strengthened my knowledge regarding the status of the right to food in SA.							
3.8 I now have a greater understanding of the right to food in South Africa.							
3.9 Dietitians should play a more active advocacy role for the right to food in South Africa.							
3.10 Comments							

<b>4. Assessment of the course</b>	Strongly disagree	Disagree	Disagree a little	Neutral/ don't know	Agree a little	Agree	Strongly agree
4.1 I feel more equipped to advocate for the right to food.							
4.2 The course gave me new knowledge and insight into the issues that need to be addressed.							
4.3 The course has made me more appreciative of human rights and aspects that relate to my own specific area of work.							
4.4 I would recommend this course to other dietitians.							
4.5 All dietitians should complete the FAO course on human rights and the right to food.							

5. General observations or comments regarding the course.

5.1 Please give the 2 most positive aspects of the course

5.2 Please give the 2 most negative aspects of the course

5.3 Any other comments

## **ADDENDUM G : PILOT STUDY – FACE VALIDITY**

CAN A FOOD AND AGRICULTURE ORGANISATION E-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

Date :

### **Introduction:**

After completing the pre-test and course evaluation form please answer, the following questions by ticking the box the yes or no box. In all cases, if your answer is no, please provide as much detail as possible. This will be of great assistance.

## Pre-test

1. Did you understand all the questions asked in section 1?

- a) Yes
- b) No


If no, please provide detail in the space provided. Mention the specific question/s.

--

2. Was the layout, of section 1 clear and easy to follow?

- a) Yes
- b) No


If no, please provide detail in the space provided.

--

3. Did you understand all the questions asked in section 2?

- a) Yes
- b) No


If no, please provide detail in the space provided by mentioning the specific question/s and what was unclear to you.

--

4. Was the layout, of section 2 clear and easy to follow?

a) Yes

b) No


If no, please provide detail in the space provided.

--

### Course evaluation form

5. Were the statements in the course evaluation form easy to understand?

a) Yes

b) No


If no, please provide detail in the space provided. Mention the specific question/s.

--

6. Was the layout clear and easy to follow?

a) Yes

b) No


If no, please provide detail in the space provided.

--

Thank you for taking the time to complete this questionnaire.

Kind regards,

Nicola Eley

## ADDENDUM H : PILOT STUDY – TESTING THE PROCESS

CAN A FOOD AND AGRICULTURE ORGANISATION E-LEARNING TOOL IMPROVE THE KNOWLEDGE AND UNDERSTANDING OF DIETITIANS IN SOUTH AFRICA REGARDING THE RIGHT TO FOOD?

Date :

### Introduction:

The purpose of the questions below is to assess the methodology being proposed by the researcher conducting the above-mentioned research. As participants in the pilot study, you received various instructions via email including a screening questionnaire, participation code, links to retrieve a pre-test and combined post-test and evaluation form.

Please answer the following questions as frankly as possible. Your feedback will provide valuable feedback. Please write any additional comments in the spaces provided.

1. Did you receive the demographic and human rights questionnaire?

- a) Yes
- b) No


--



2. Were you able to open the document?

a) Yes

b) No


--

3. Did you receive a participation code?

a) Yes

b) No


--

4. Did you receive a link to SurveyMonkey?

a) Yes

b) No


--

5. Were you able to access the pre-test?

a) Yes

b) No


--

6. Did you access the distance-learning course on FAO's website?

a) Yes

b) No


--

7. Did you create a personal login profile?

a) Yes

b) No


--

8. Did you receive another link to SurveyMonkey, where the post-test and course evaluation form could be accessed?

a) Yes

b) No


--

9. Were you able to open the post-test and course evaluation form?

a) Yes

b) No


--

Thank you for taking the time to complete this questionnaire.

Kind regards,

Nicola Eley

**ADDENDUM I: MARKING RUBERIC****Section 1**

1. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

The pillars of food security include:

- a) That people are able to feed themselves by having access to productive land on which to grow their own food or obtain it from markets and stores
- b) That food satisfies dietary needs throughout the life cycle and contains a mix of nutrients to allow for normal physical and mental growth, development and maintenance of the body
- c) That government provides physical and economic access to food
- d) That the food supply is stable throughout the year


**Answer: a, b and d**

2. Food security programmes are cross cutting and should involve many stakeholders, name 3 main role players in the table below.

	Role players
1	
2	
3	

**Answer: Private sector, government, Department of Health, Department of Agriculture, Forestry and Fisheries, Department of Education**

3. Match the attribute in column A to the corresponding explanation in column B. Indicate the corresponding number in the space provided. Human rights can be defined as:

Column A: Attributes of human rights	Column B: Explanation
a) Universal	1. All human rights are on the same level - no one right is more important than another.
b) Indivisible	2. All human rights are applicable everywhere and to everyone.
c) Interdependent	3. All human rights need to be considered when one is being realised.
d) Interrelated	4. The realisation of one human right is dependent on the realisation of others.

**Answer:**

**1 – d**

**2 – a**

**3 – b**

**4 – c**

4. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

A human rights-based approach to development:

- a) entails economic growth and increasing people's choices and opportunities
- b) puts individuals' growth first
- c) can be defined as increased national wealth and production
- d) includes economic, social, cultural and political processes aimed at the improvement of the well-being of all individuals


**Answer: b and d**

5. Under the terms of Articles 2 and 11 of the ICESCR, there are 4 general State obligations with respect to the right to food. Name all 4 in the table provided.

	State obligations
1	
2	
3	
4	

**Answer:**

**1 - Obligation to take steps to the maximum of available resources to realise the right to food**

**2 - Obligation to take measures needed to ensure the fundamental right of everyone to be free from hunger**

**3 - Obligation of non-discrimination**

#### 4 - Obligation to cooperate

6. Complete the sentence. The aim of the United Nations document titled “General Comment 12” is to...

**Answer:**

**Identify some of the principle issues which are important in relation to the right to food.**

**Authoritative interpretation of Article 11 of the ICESCR.**

**Elaborates on the principles of the right to food.**

7. Complete the sentence. The Voluntary Guidelines on the right to adequate food are...

**Answer:**

**Voluntary and non-legally binding, build on international law and provide guidance on implementing already existing obligations.**

**Individuals have the right to an enabling environment.**

**Voluntary Guidelines advocate for targeted assistance and emphasise accountability**

8. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

The Sustainable Development Goals (SDG's), can be strengthened by applying a human rights-based approach ensuring:

- a) goals are made more legitimate as states have agreed to meet certain obligations
- b) the human rights language of “rights” and “duties” is used
- c) the root causes of poverty and underdevelopment are addressed
- d) transparency and accountability are strengthened


**Answer: All the above – a, b, c and d**

9. South Africa has committed to meeting the SDG's. Which SDG's are related to the right to food? Write the specific SDG out in full in the space provided.

--

**Answer: All the SDG's**

- a) Zero poverty
- b) Zero hunger
- c) Good health and well-being
- d) Quality education
- e) Gender equality
- f) Clean water and sanitation



- g) Affordable and clean energy**
- h) Decent work and economic growth**
- i) Industry, innovation and industry**
- j) Reduced inequalities**
- k) Sustainable cities and communities**
- l) Responsible consumption and production**
- m) Climate action**
- n) Life below water**
- o) Life on land**
- p) Peace, justice and strong institutions**
- q) Partnerships for the goals**

10. Complete the sentence. The 3 levels of state obligations are “respect, protect and fulfil”.

Provide an explanation for each in the table provided.

	Explanation
Respect	
Protect	
Fulfil	

**Answer:**

**1 – Respect:** A state cannot confiscate land or water resources, prevent or limit access of individuals or groups to plant or animal resources necessary for ensuring their food security or destroy people's food resources. Name one.

**2 – Protect:** The State must act to prevent third parties from interfering or violating the right to food that people have. The obligation to protect also includes that food put on the market is safe and nutritious. States must therefore establish and enforce food quality and safety

standards, and ensure fair and equal market practices. States should take legislative and other measures needed to protect people from advertising and promotions of unhealthy food especially children, as to support the efforts of parents and health professionals to encourage healthier patterns of eating and physical exercise. Name one

**3 – Fulfil: The State must create conditions allowing for the effective realisation of the right to food, and provide food directly to individuals or groups who are not able to procure food on their own.**

11. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

The realisation of the right to adequate food is dependent on the realisation of the following rights or freedoms.

a) Information

b) Speech

c) Work

d) Religion

e) Housing

f) Land

g) Education

h) Health care


**Answer: a, c, e, f, g and h**

12. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

In international human rights law, individuals are guaranteed the right:

- a) to feed themselves
- b) to feed themselves and their families
- c) to be fed in dignity when they are unable to feed themselves
- d) to be fed by government


**Answer: a, b and c**

13. Read the statement carefully and select the most appropriate answer from the options provided by ticking the corresponding box. You can choose more than one option.

A human rights-based approach to development is essential to realising the right to food because:

- a) it furthers the realisation of all human rights
- b) it aims to promote and protect human rights
- c) it gives people the possibility to make legally binding claims that specific duty bearers must provide
- d) it demands the use of disaggregated data, in order to ensure non-discrimination and attention on respecting and protecting the human rights of the most vulnerable


**Answer: a and c**

14. Name two government programmes that directly or indirectly assist in meeting the South African government's obligation towards the right to food in the box provided.

1	
2	

**Answer: Grants (Social Assistance Act), Nutrition Therapeutic Programme, National School Nutrition Programme, free primary healthcare, free basic education, Comprehensive Agriculture Support Programme, Expanded Public Works Programme**

15. How many articles in the South African constitution relate specifically to the right to food and to whom does each refer? Answer in the box provided.

--

**Answer: 3 – all citizens, children and detainees**

16. Name 3 organizations/institutions in South Africa that directly or indirectly protect the right to food.

1	
2	
3	

**Answer: South African Human Rights Commission, Constitutional Court, Public Protector**

17. What conditions must be met for food to be adequate? List 4 in the space provided and briefly describe each condition.

	Condition	Description
1		
2		
3		
4		

**Answer:**

**1 – Available: directly from productive land or obtained in markets and stores**

**2 – Accessible:**

**a) Personal or household financial means to buy food for an adequate diet**

**b) Food must be accessible to everyone**

**3 – Stable supply: both availability and accessibility of food must be guaranteed in a stable manner – all year round**

**4 – Adequate: satisfies dietary needs throughout the life cycle**

**Section 2**

True/False questions:

Please read the statement carefully and state whether it is true or false by ticking the corresponding block.

	True	False
18. The primary aim of the South African Human Rights Commission (SAHRC) is to monitor government's compliance towards human rights.	X	
19. The realisation of socio-economic rights is not essential in achieving civil and political rights.		X
20. All human rights are fundamental rights and freedoms essential for human survival, liberty and dignity.	X	
21. Children's right to food can be progressively realised.		X
22. A human rights-based approach to development focuses on the outcome of the development process.		X
23. All members of society have responsibilities towards realising the right to food, only states have legal obligations.		X
24. The right to food is categorised as a civil right.		X
25. The right to food is specifically related to agricultural production and the rights of farmers to produce food.		X
26. Rights-holders are only those individuals or groups who have knowledge of their rights and who are able to demand services and goods from the government.		X
27. A rights-based approach to policy development and implementation is important to government officials only.		X
28. The 3 levels of state obligations as outlined in the International Covenant on Economic, Social and Cultural Rights are 'respect, provide and fulfil'.		X
29. "Justiciability" means that an individual is able to complain before a court or other independent authority about an alleged violation of his or her rights.	X	
30. Creating a legal framework for the protection of the right to food is the only way the state can be held accountable by individuals.		X

31. South Africa is nutritionally secure on a national level therefore supplementation programmes are unnecessary.		X
32. The acronym PANTHER stands for - Participation, Action, Nutrition, Transparency, Human rights, Economic growth and Rule of law.		X
33. The Integrated Nutrition Programme (INP) and the National School Nutrition Programme (NSNP) aim to ensure the rights of children to access to food.	X	
34. In an urban-setting, it is easier to achieve nutritional adequacy than in rural areas due to easier access to various food retail outlets.		X
35. The grant system in South Africa addresses poverty and food insecurity and hence can be regarded as a human rights instrument.		X
36. The right to be free from hunger is defined in General Comment 12 as being a minimum core standard.	X	
37. South Africa ratified the International Covenant on Economics Social and Cultural Rights on 10 December 1998.		X

## ADDENDUM J: Ethics Approval letter, dated 20 January 2017



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jou kennisvennoot • your knowledge partner

### Approval Notice New Application

10-Mar-2017  
ELEY, Nicola Mary

**Ethics Reference #:** S17/01/020

**Title:** An investigation to determine whether the distance learning tool developed by the FAO can change the knowledge and understanding of dietitians in Sout

Dear Miss Nicola ELEY,

The **New Application** received on 20-Jan-2017, was reviewed by members of **Health Research Ethics Committee 2** via Expedited review procedures on 10-Mar-2017 and was approved.

Please note the following information about your approved research protocol:

Protocol Approval Period: 10-Mar-2017 -09-Mar-2018

Please remember to use your **protocol number** (S17/01/020) on any documents or correspondence with the HREC concerning your research protocol.

Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

#### After Ethical Review:

Please note a template of the progress report is obtainable on [www.sun.ac.za/ids](http://www.sun.ac.za/ids) and should be submitted to the Committee before the year has expired. The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

Translation of the consent document to the language applicable to the study participants should be submitted.

Federal Wide Assurance Number: 00001372

Institutional Review Board (IRB) Number: IRB0005239

The Health Research Ethics Committee complies with the SA National Health Act No.61 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 Part 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

#### **Provincial and City of Cape Town Approval**

Please note that for research at a primary or secondary healthcare facility permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health ([healthres@pgwc.gov.za](mailto:healthres@pgwc.gov.za) Tel: +27 21 483 9907) and Dr Helene Visser at City Health ([Helene.Visser@capetown.gov.za](mailto:Helene.Visser@capetown.gov.za) Tel:



+27 21 400 3981). Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research.

For standard HREC forms and documents please visit: [www.sun.ac.za/rds](http://www.sun.ac.za/rds)

If you have any questions or need further assistance, please contact the HREC office at .

**Included Documents:**

Add E - course evaluation form\_NMEley 2017.pdf  
4 Add B Protocol\_NMEley\_2017.pdf  
8a Investigator Declaration\_NMEley\_2017 signed.pdf  
Add D\_Post-test\_NMEley 2017.pdf  
Add F Marking Rubric\_NMEley 2017.pdf  
5 Protocol synopsis for Ethics application\_2017 NMEley 2017.pdf  
2 General Checklist(Eng)\_NMEley\_2017.pdf  
Add G Pilot study questionnaire - testing the process\_NMEley 2017.pdf  
Add A - Demographic and HR Questionnaire NMEley 2017.pdf  
6 Add B Informed Consent 2017 NMEley 2017.pdf  
7a CV Researcher\_NMEley\_2017.pdf  
8c Investigators Declaration HE Koornhof.pdf  
1 HREC Application form.pdf  
8b Investigator Declaration MMarais.pdf  
Add C\_Pre-test\_NMEley 2017.pdf  
Cover letter.pdf  
7c CV HE Koornhof Jan 2017.pdf  
7b CV\_MLMarais\_studyleader.pdf

Sincerely,

Francis Masiye  
HREC Coordinator  
Health Research Ethics Committee 2